NO-EQUAL pledge of performance

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Nos esforzamos fuerte diariamente combinando el talento de nuestro personal con la calidad de nuestros productos y servicios excediendo sus expectativas para tenerlo a usted como cliente. Este es nuestro compromiso para con usted.

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SIMPSON Strong-Tie®

INSTALLER'S POCKET GUIDE

GUÍA DE BOLSILLO PARA EL INSTALADOR

S-INSTALL09

The information in this guide is intended to show contractors how our products should be installed. It is not intended for use by Designers. Designers should refer to the current Simpson Strong-Tie® ***Wood Construction Connectors*** catalog for loads and other critical design information.

La información de esta guía tiene la intención de mostrarles a los contratistas como deben instalar nuestros productos. No está diseñada para que la usen los diseñadores. Los diseñadores deben referirse al catálogo actual de ***Conectores para Construcciones de Madera*** para determinar las cargas y demás información crítica para el diseño.

QUESTIONS?
¿PREGUNTAS?
(800) 999-5099

This guide is intended to provide a quick reference tool to aid in the correct installation of Simpson Strong-Tie® products. It is important that users follow any installation guidelines specified by the Designer and refer to the current Simpson Strong-Tie ***Wood Construction Connectors*** catalog for other important installation information.

This guide is not intended for use as a design tool by Designers. Please see the current Simpson Strong-Tie ***Wood Construction Connectors*** catalog for complete technical data and other important design information.

Esta guía tiene como objetivo servir como herramienta de referencia rápida para facilitar la correcta instalación de los productos Simpson Strong-Tie®. Es importante que los usuarios sigan todas las pautas de instalación especificadas por el diseñador y consulten el catálogo de ***Conectores para Construcciones de Madera*** de Simpson Strong-Tie para obtener más información importante sobre la instalación.

Esta guía no está ideada para ser usada como herramienta de diseño por parte de diseñadores. Consulte el catálogo de ***Conectores para Construcciones de Madera*** de Simpson Strong-Tie para conocer todos los datos técnicos y otros datos importantes de diseño.

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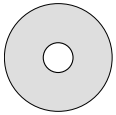
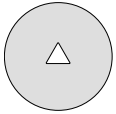
Connectors: Types of Nail Holes
Conectores: Tipos de Agujeros de Clavo



ROUND
REDONDO

- **Purpose:**
  To fasten a connector.
- **Fill Requirements:**
  Always fill, unless otherwise noted.

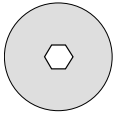
- **Propósito:**
  Para fijar un conector.
- **Requisitos para Llenar:**
  Llénelo siempre, salvo que se indique lo contrario.



TRIANGULAR

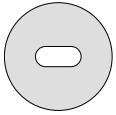
- **Purpose:**
  To increase a connector's strength or to achieve MAX strength.
- **Fill Requirements:**
  When the Designer specifies "Max" nailing.

- **Propósito:**
  Para aumentar la fuerza de un conector o para lograr una fuerza máxima.
- **Requisitos para Llenar:**
  Llénelo cuando el diseñador lo especifica clavado "Máx.".



HEXAGONAL

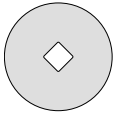
- **Purpose:**
  To fasten a connector to concrete or masonry.
- **Fill Requirements:**
  Always fill when fastening a connector to concrete or fastening a connector with masonry screws.



OBROUND
ALARGADO

- **Purpose:**
  To make fastening a connector in a tight location easier.
- **Fill Requirements:**
  Always fill, unless otherwise noted.

- **Propósito:**
  Para fijar un conector en una locación apretada con el fin de facilitar el trabajo.
- **Requisitos para Llenar:**
  Llénelo siempre, salvo que se indique lo contrario.



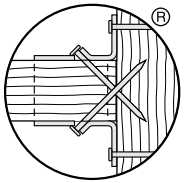
DIAMOND
DIAMANTE

- **Purpose:**
  To temporarily fasten a connector to make installing it easier.
- **Fill Requirements:**
  None.

- **Propósito:**
  Para fijar temporalmente un conector, con el propósito de facilitar su instalación.
- **Requisitos para Llenar:**
  Ninguno.

- **Propósito:**
  Para fijar un conector a concreto o mampostería.
- **Requisitos para Llenar:**
  Siempre llénelo al fijar un conector a concreto o al fijar un conector con tornillos de mampostería.

Connectors: Types of Nail Holes
Conectores: Tipos de Agujeros de Clavo

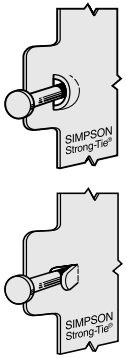


DOUBLE-SHEAR NAILING

CLAVADO DE DOBLE PENETRACIÓN

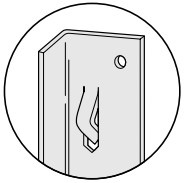
- **Purpose:**
  Installed into the joist and header, distributing the load through two points on each joist nail for greater strength. Must use full length nail.
- **Fill Requirements:**
  Always fill, and make sure you use the right nail.

- **Propósito:**
  Para lograr mayor fuerza, los clavos penetran a la vigueta y la viga cabezal, así distribuyendo la carga entre las dos puntas de cada clavo.
- **Requisitos para Llenar:**
  Llénelo siempre, y asegúrese de usar el clavo correcto.



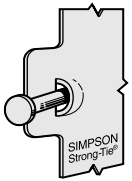
DO NOT use short (1½") nails for double-shear nailing.

NO usen los clavos cortos de 1½" para uso de doble penetración.



SPEED PRONGS

- **Purpose:**
  To temporarily position and secure the connector for easier and faster installation.
- **Fill Requirements:**
  None.

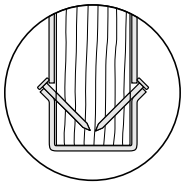


DOME NAILING
U.S. Patent No. 5,603,580

CLAVADO CON CÚPULA
Patente de EE.UU. No. 5,603,580

- **Purpose:**
  To guide the nail into the joist and header at a 45° angle.
- **Fill Requirements:**
  Always fill, and make sure you use the right nail.

- **Propósito:**
  Con este dispositivo se guían el clavo en la vigueta y la viga cabezal en ángulo de 45°.
- **Requisitos para Llenar:**
  Llénelo siempre, y asegúrese de usar el clavo correcto.



POSITIVE-ANGLE NAILING

CLAVADO EFECTIVO EN ÁNGULO

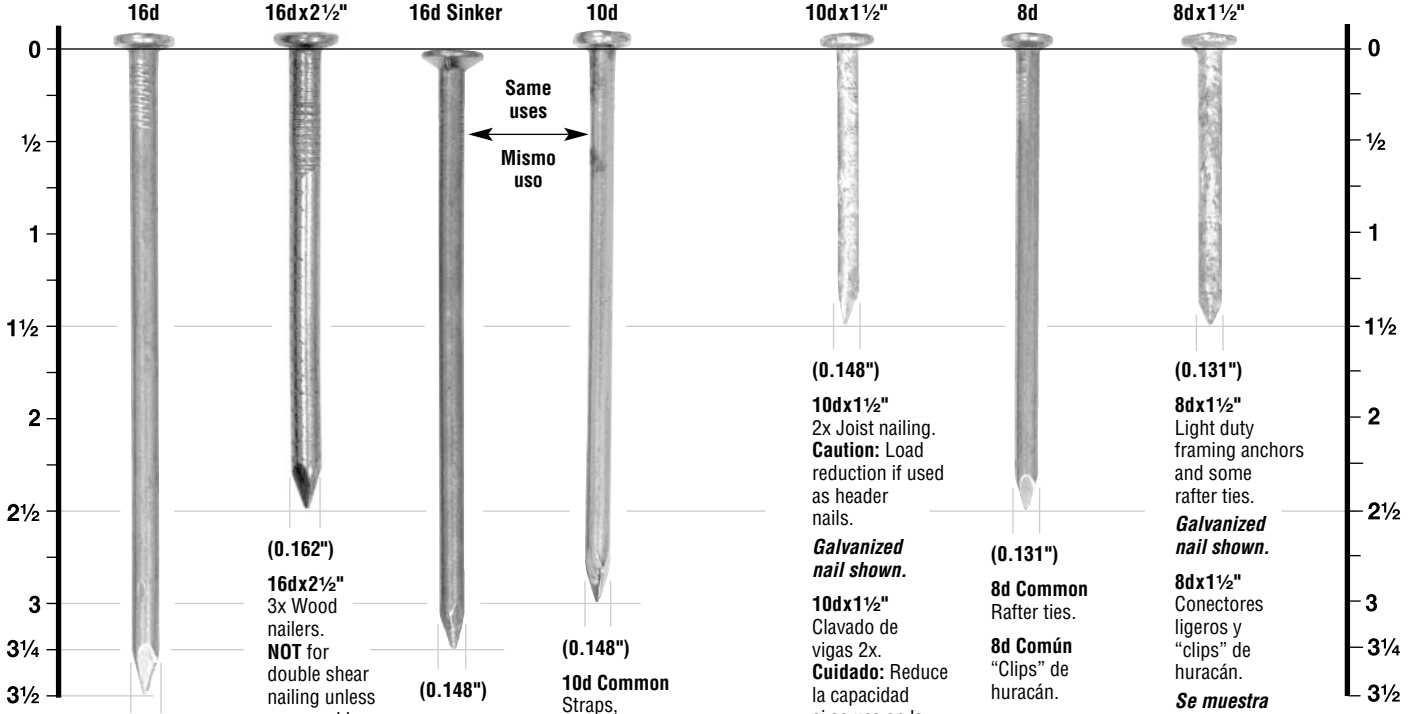
- **Purpose:**
  Provided when wood splitting may occur, and to speed installation.
- **Fill Requirements:**
  Always fill, and make sure you use the right nail.

- **Propósito:**
  Se usa cuando la madera puede rajarse o abrirse y con el propósito hacer más rápida la instalación.
- **Requisitos para Llenar:**
  Llénelo siempre, y asegúrese de usar el clavo correcto.

DIENTES RÁPIDOS

- **Propósito:**
  Se usan para colocar el conector y fijarlo temporalmente, con el fin de facilitar y hacer más rápida su instalación.
- **Requisitos para Llenar:**
  Ninguno.

Fasteners/Clavos



(0.162")

16d Common
Straps, heavy hangers, plated truss and SCL connectors.

16d Común
Cintas, soporte de viga pesadas, para cerchas y madera composito.

(0.162")

16dx2½"
3x Wood nailers. **NOT** for double shear nailing unless approved by Designer.

16dx2½"
Para madera de 3". **NO** para clavado de double penetración salvo que así lo apruebe el diseñador.

(0.148")

16d Sinker
Straps, hangers, header fastening.

16d Sinker
Cintas, soporte de viga.

(0.148")

10d Common
Straps, hangers, header fastening.

10d Común
Cintas, soporte de viga.

(0.148")

10dx1½"
2x Joist nailing. **Caution:** Load reduction if used as header nails.

Galvanized nail shown.

10dx1½"
Clavado de vigas 2x. **Cuidado:** Reduce la capacidad si se usa en la viga cabezal.

Se muestra un clavo galvanizado.

(0.131")

8d Common
Rafter ties.

8d Común
"Clips" de huracán.

(0.131")

8dx1½"
Light duty framing anchors and some rafter ties.

Galvanized nail shown.

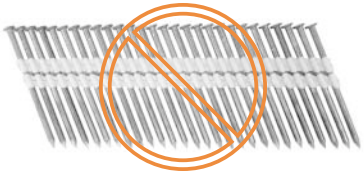
8dx1½"
Conectores ligeros y "clips" de huracán.

Se muestra un clavo galvanizado.

When using stainless-steel connectors, use stainless-steel fasteners. When using ZMAX®/hot-dip galvanized connectors, use fasteners galvanized per ASTM A153.

Al usar los conectores del acero inoxidable, utilice los sujetadores del acero inoxidable. Al usar conectores ZMAX®/HDG galvanizados, utilizan los sujetadores galvanizados por ASTM A153.

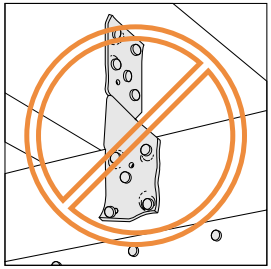
Fasteners/Clavos



Framing nail-gun nails can only be used if:

1. Correct diameter and length
2. Correct quantity is installed
3. Driven with a hole location tool *(finds the hole)* or by hand

NOTE: .121 may NOT be used to replace 10d or 16d nails.



DO NOT OVERDRIVE

NO SHOOTING-THRU CONNECTORS

Sólo se pueden utilizar clavos estructurales para pistola si:

1. Tengan diámetro y tamaño correcto
2. Se instala la cantidad correcta
3. Usan maquina que encuentre el agujero, o se clavan a mano

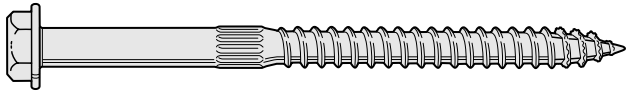
NOTA: NO se pueden utilizar clavos 121 como sustitutos de clavos 10d o 16d.

NO SE METE DEMASIADO

NO SE PUEDE HACER AGUJEROS CON MAQUINA

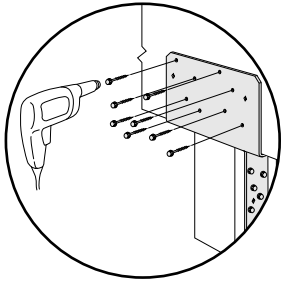
Common screws may NOT be used to replace NAILS in connectors.

NO se puede usar tornillos comunes en vez de CLAVOS en conectores.



Some connectors install with the Simpson Strong-Tie® Strong-Drive® (SDS) ¼" structural wood screw.

1. Install with ⅜" hex socket or nut driver
2. Pre-drilling generally not required
3. Do not substitute with lag screws



Algunos conectores se instalan con el tornillo para madera estructural Strong Drive® (SDS) de ¼" de Simpson Strong-Tie®.

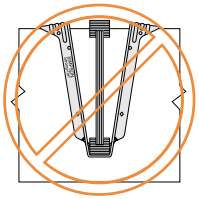
1. Instalar con un destornillador de casquillo hexagonal o de tuercas de ⅜"
2. Generalmente no es necesario efectuar perforaciones previas
3. No sustituir con tirafondos

MACHINE BOLT
Diameter: ½, ⅝, ¾, ⅞, 1

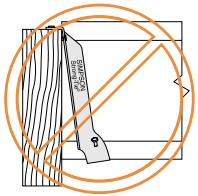
PERNOS
Diametro: ½, ⅝, ¾, ⅞, 1

General Connector Installation
Instalación de Conectores en General

TOP FLANGE HANGERS / SOPORTES CON ALA SUPERIOR

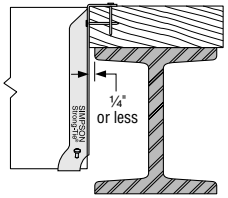


Hanger over-spread
Soporte demasiado abierto

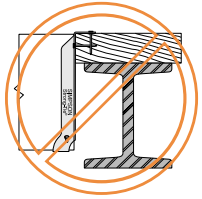


Hanger not plumb
Soporte fuera de plomo

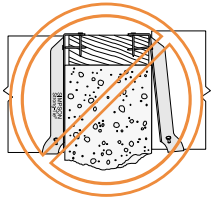
WOOD NAILERS / LISTONES CLAVADORES DE MADERA



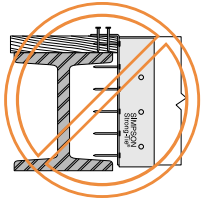
Correct attachment
Montaje correcto



Nailer too wide
Listón clavador muy ancho

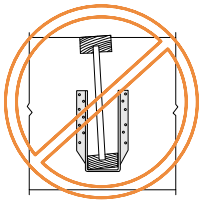


Nailer too narrow
Listón clavador muy estrecho



Nailer too thin
Listón clavador demasiado delgado

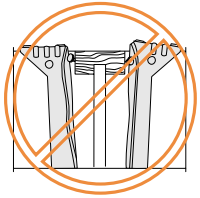
PREVENT ROTATION / EVITAR LA ROTACIÓN



Shorter hanger with no web stiffener results in rotation

Un soporte colgante más corto sin de entramado permitirá la rotación

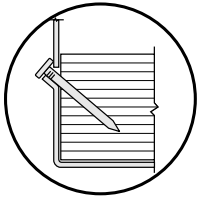
TOE-NAILING / CLAVADO EN DIAGONAL



Do not toe nail I-joists before installing top flange or face mount hangers

No clave en ángulo las viguetas 'I' antes de montar los soportes *(con o sin ala superior)*

POSITIVE ANGLE NAILING
CLAVADO EFECTIVO EN ÁNGULO



Correct nailing approx. 45° angle

Clavado correcto aproximadamente a 45°

Nail at wrong angle

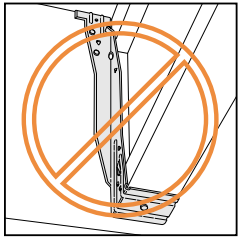
Clavado con un ángulo incorrecto

Nail too long

Clavos demasiado largos

General Connector Installation
Instalación de Conectores en General

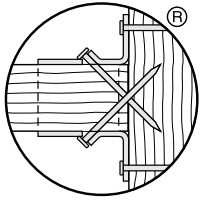
ITS/IUS HANGERS / SOPORTES DE ITS/IUS



DO NOT make your own holes
DO NOT nail bottom chord

NO haga otros orificios para los clavos
NO clave en la viga inferior

DOUBLE SHEAR NAILING
CLAVADO DE DOBLE PENETRACIÓN



Double-shear nailing must use full length 10d or 16d common nails

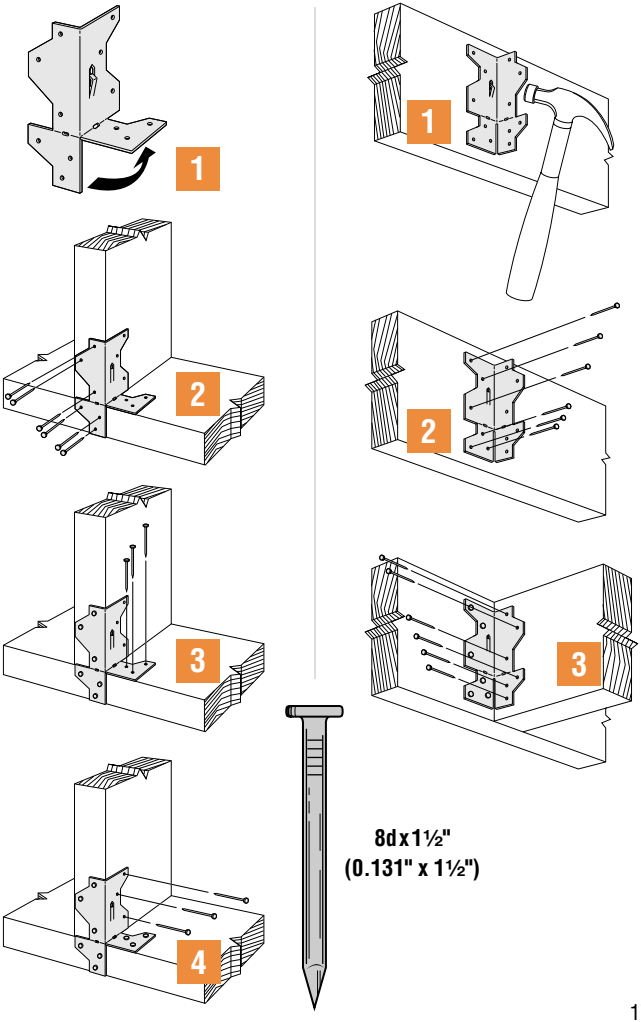
Al trabajar con clavado de doble penetración, se deben emplear clavos comunes 10d o 16d de longitud normal

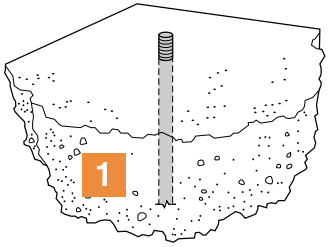
Shorter nails may not be used as double-shear nails

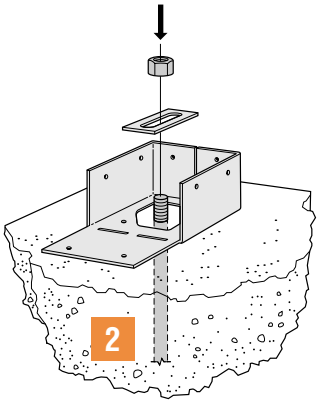
No se pueden utilizar clavos más cortos como clavos de doble penetración

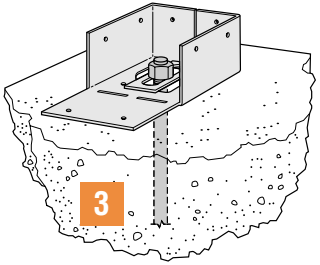
A35

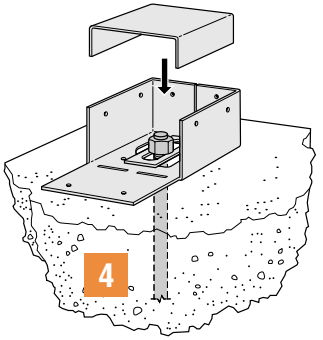
SIMPSON StrongTie





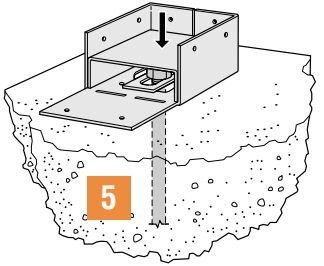


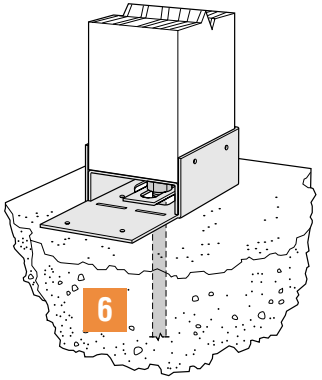


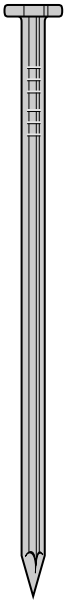


If using an adhesive anchor, see page 24 for instructions.

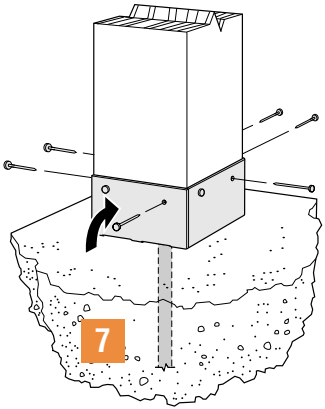
Si utiliza un anclaje adhesivo, consulte las instrucciones de la página 24.



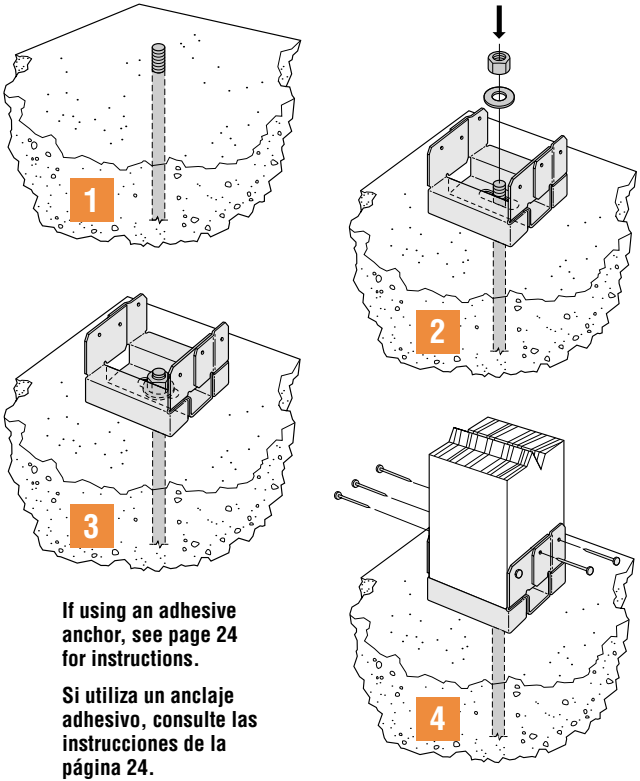




10d
(0.148" x 3")



ABA



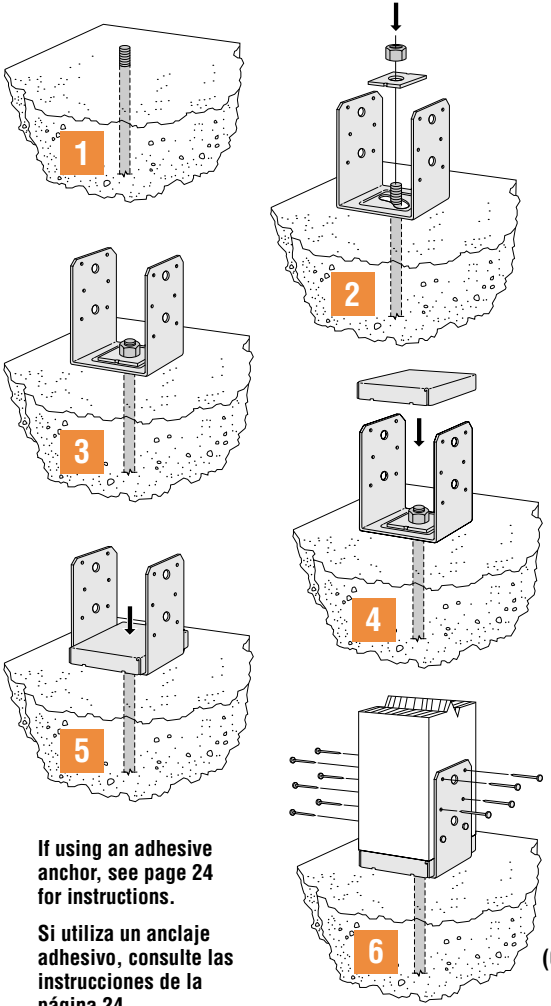
If using an adhesive anchor, see page 24 for instructions.

Si utiliza un anclaje adhesivo, consulte las instrucciones de la página 24.

16d (0.162" x 3½") – ABA46, ABA46R, ABA66, ABA66R

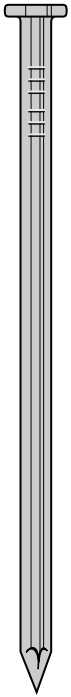
10d (0.148" x 3") – ABA44, ABA44R

ABU – Nails/Clavos



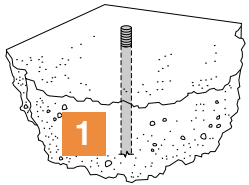
If using an adhesive anchor, see page 24 for instructions.

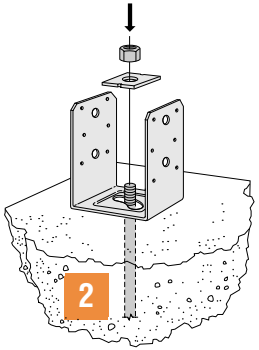
Si utiliza un anclaje adhesivo, consulte las instrucciones de la página 24.

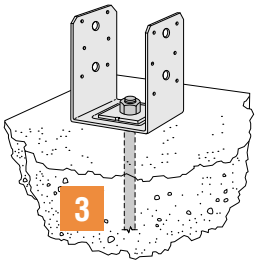


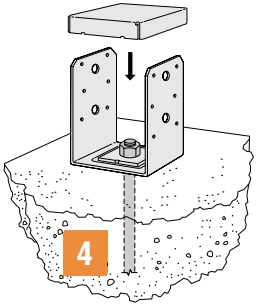
16d (0.162" x 3½")

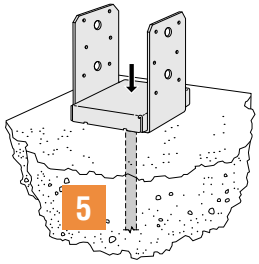
ABU – Machine Bolts/Pernos







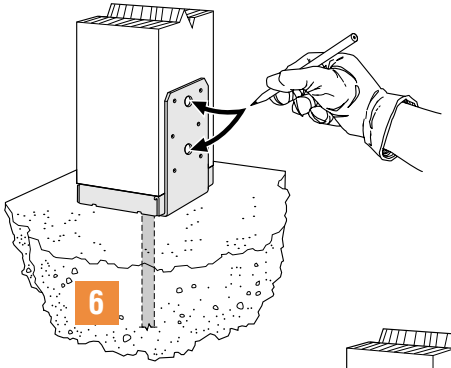


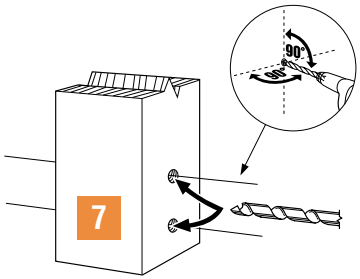


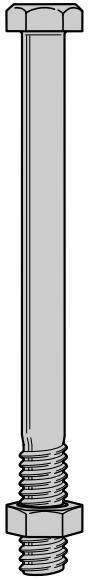
If using an adhesive anchor, see page 24 for instructions.

Si utiliza un anclaje adhesivo, consulte las instrucciones de la página 24.

ABU – Machine Bolts/Pernos





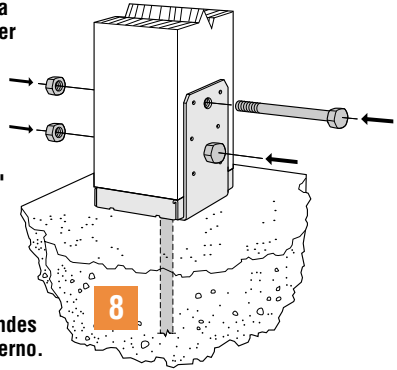


Machine Bolt
Diameter: ½"
Length:
ABU44/ABU46 = 4½"
ABU66 = 6½"

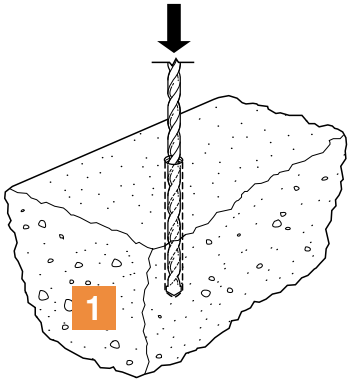
Bolt holes must be a minimum of 1/32" and a maximum of 1/16" larger than bolt diameter.

Perno Torneado
Diámetro: ½"
Largo:
ABU44/ABU46 = 4½"
ABU66 = 6½"

Los orificios para los pernos deben ser al menos 1/32" y como máximo 1/16" más grandes que el diámetro del perno.

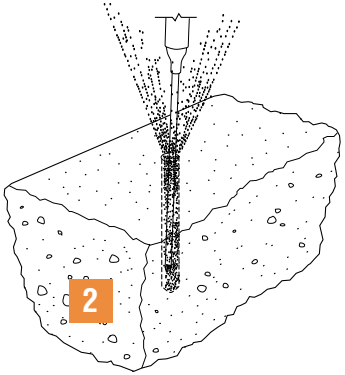


Adhesive Anchoring
Anclaje Adhesivo



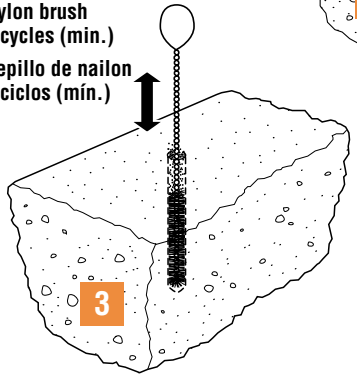
Compressed air
(80 psi min.),
4 seconds (min.)

Aire comprimido
(80 psi mín.),
4 segundos (mín.)



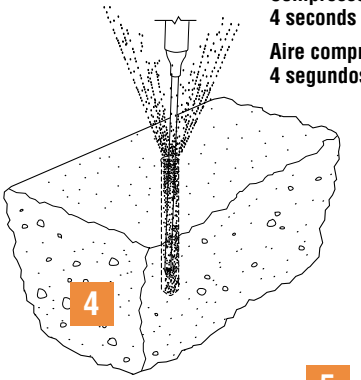
Nylon brush
4 cycles (min.)

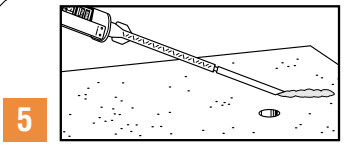
Cepillo de nailon
4 ciclos (mín.)



Compressed air (80 psi min.),
4 seconds (min.)

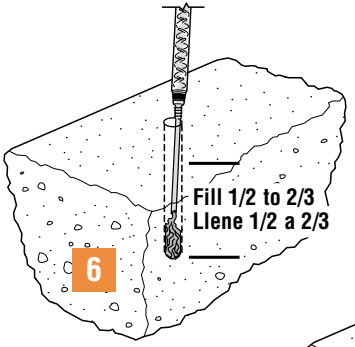
Aire comprimido (80 psi mín.),
4 segundos (mín.)



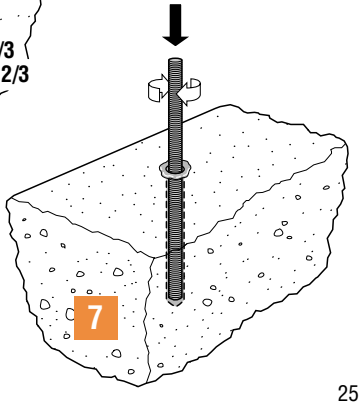


Dispense until uniform color

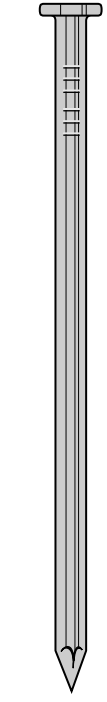
Aplique hasta lograr un color uniforme



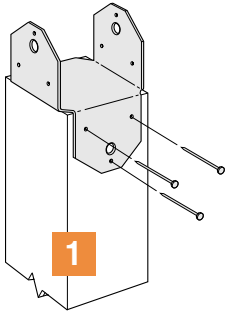
Fill 1/2 to 2/3
Llene 1/2 a 2/3

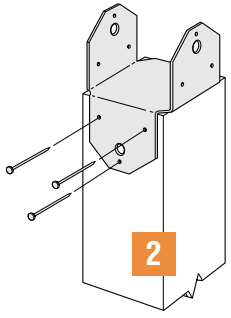


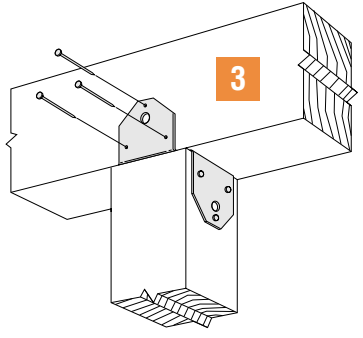
BC

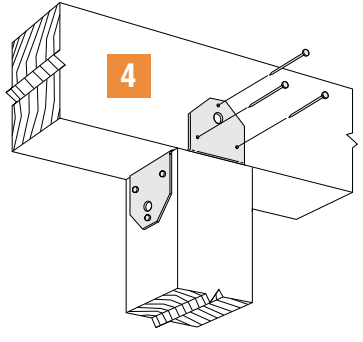


16d
(0.162" x 3½")

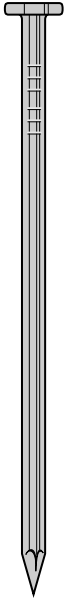




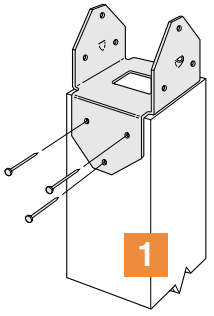


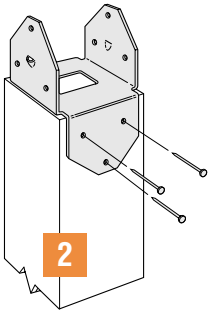


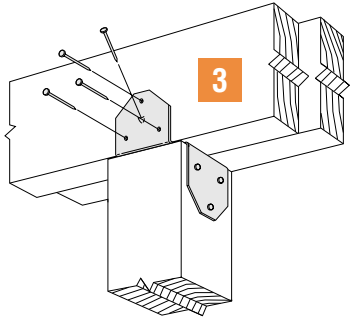
BCS2-2/4

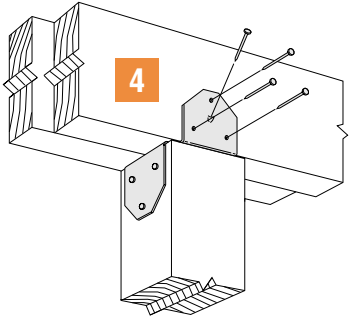


10d
(0.148" x 3")

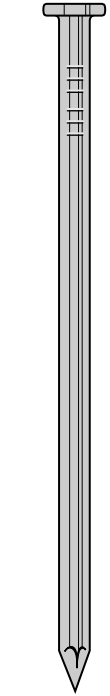




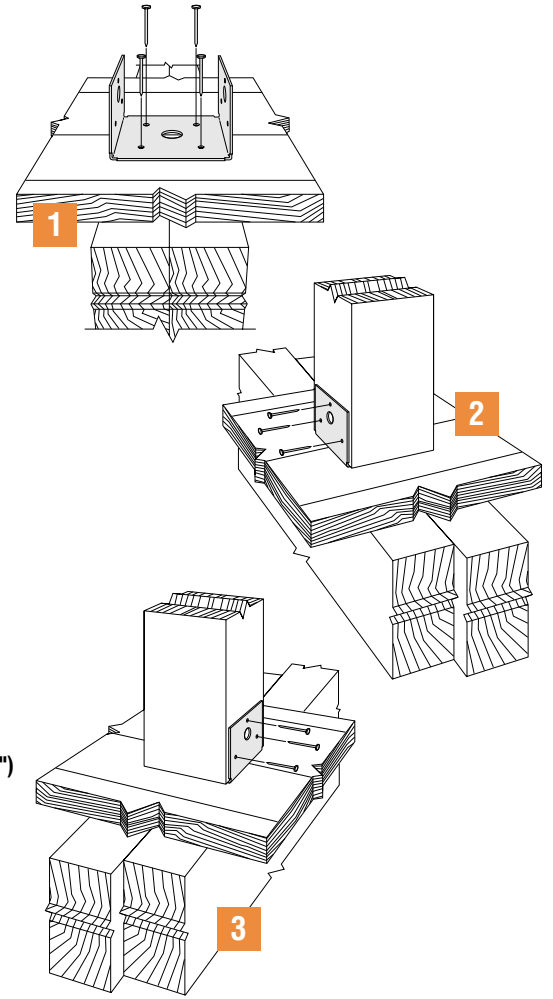




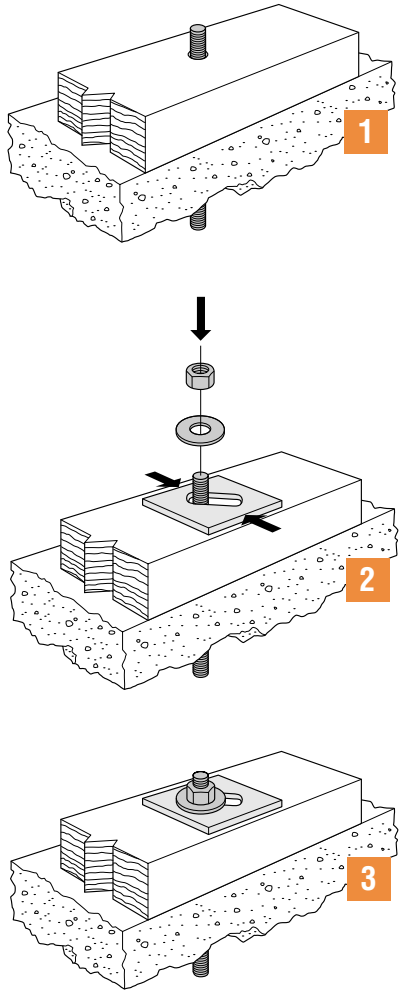
BC40

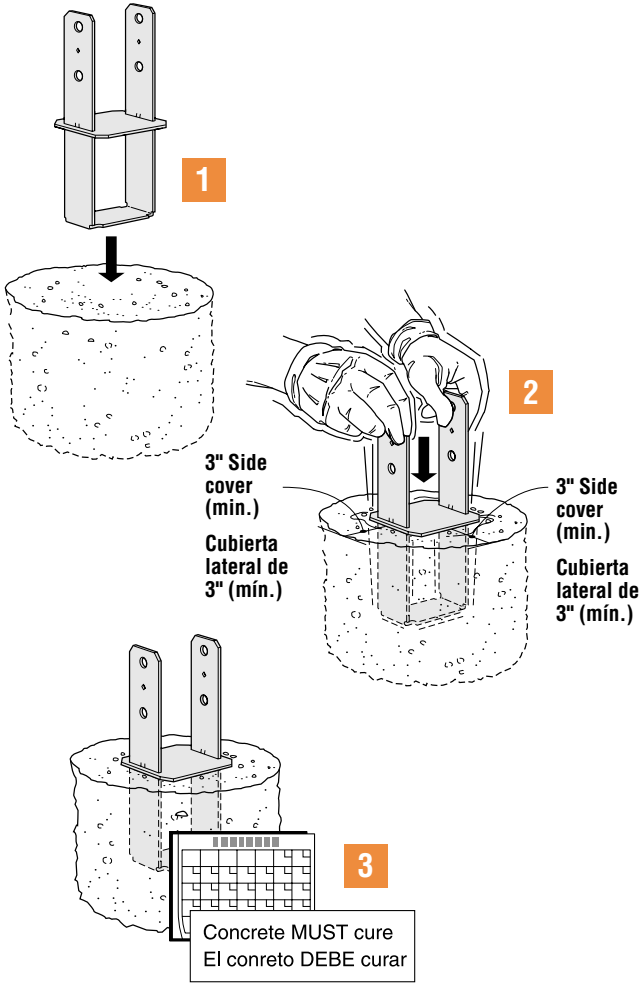


16d
(0.162" x 3½")



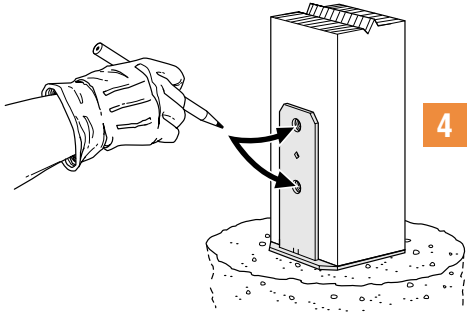
BPS-LBPS

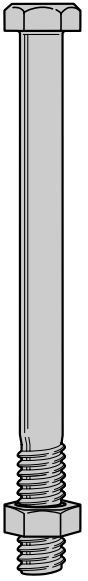




CB – Machine Bolts/Pernos

SIMPSON Strong-Tie



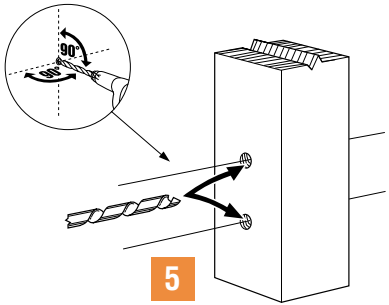


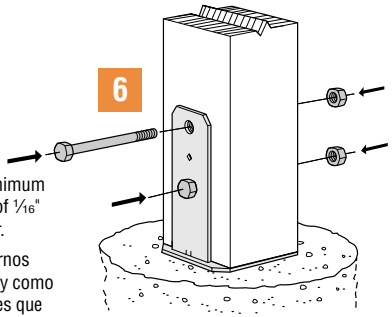
Machine Bolt
Perno

Model No./ N.º de Modelo	Machine Bolt Size/ Tamaño del Perno
CB44	⅝" x 4½"
CB46	⅝" x 4½"
CB48	⅝" x 4½"
CB64	⅝" x 4½"
CB66	⅝" x 6½"
CB68	⅝" x 6½"
CB86	¾" x 8½"
CB88	¾" x 8½"
CB1010	¾" x 10½"
CB1012	¾" x 10½"
CB1212	¾" x 11½"

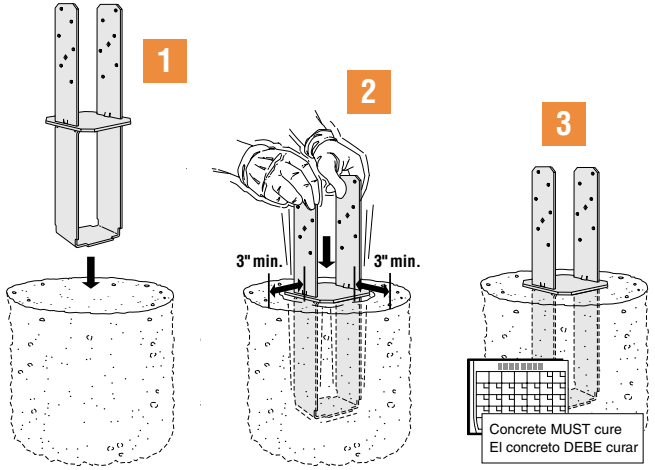
Bolt holes must be a minimum of 1/32" and a maximum of 1/16" larger than bolt diameter.

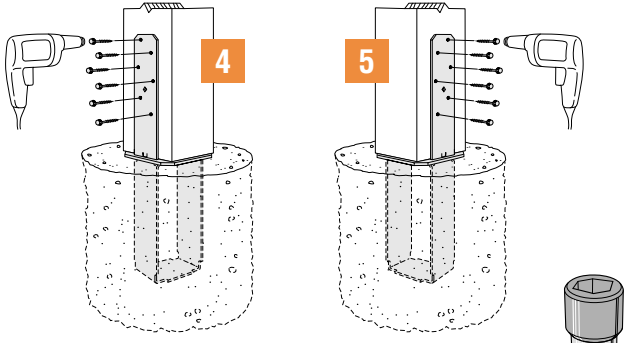
Los orificios para los pernos deben ser al menos 1/32" y como máximo 1/16" más grandes que el diámetro del perno.

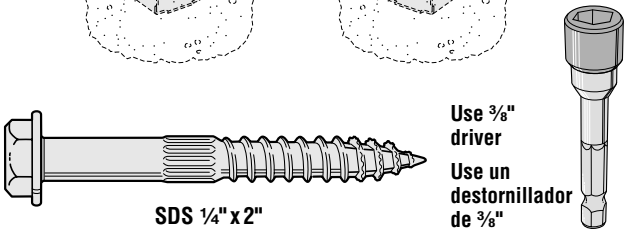




CBQ





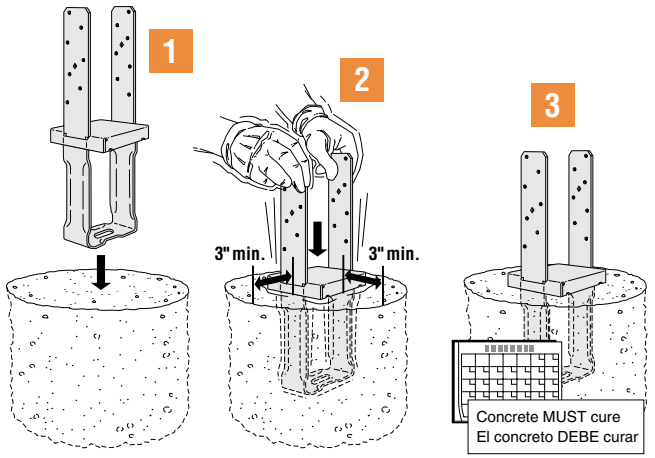


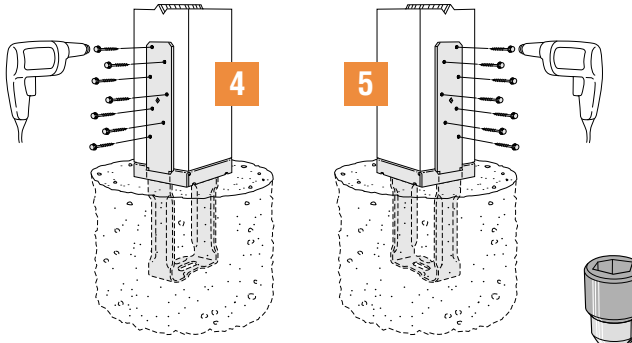
SDS ¼" x 2"

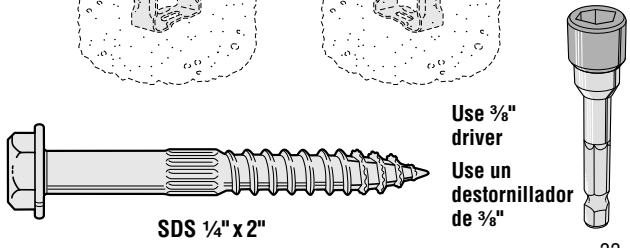
Use ⅜" driver

Use un destornillador de ⅜"

CBSQ





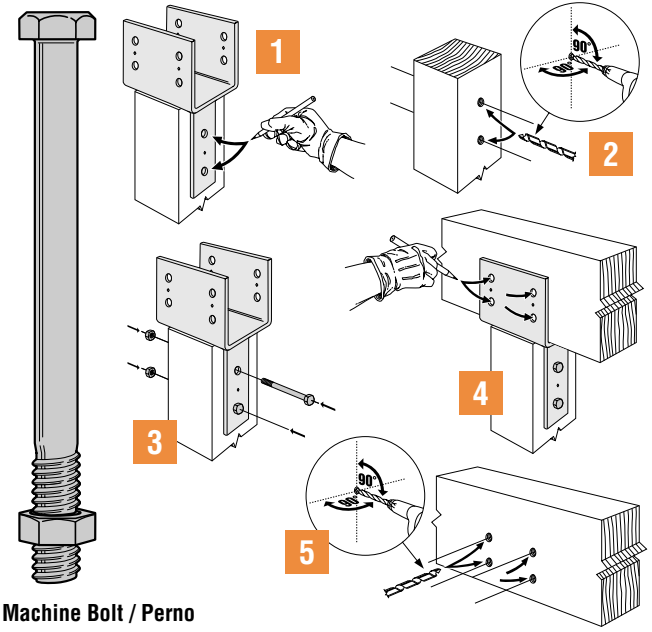


SDS ¼" x 2"

Use ⅜" driver

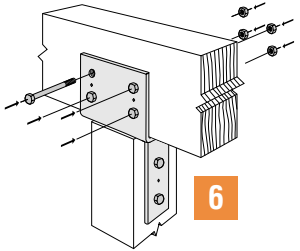
Use un destornillador de ⅜"

CC – Machine Bolts/Pernos



Machine Bolt / Perno

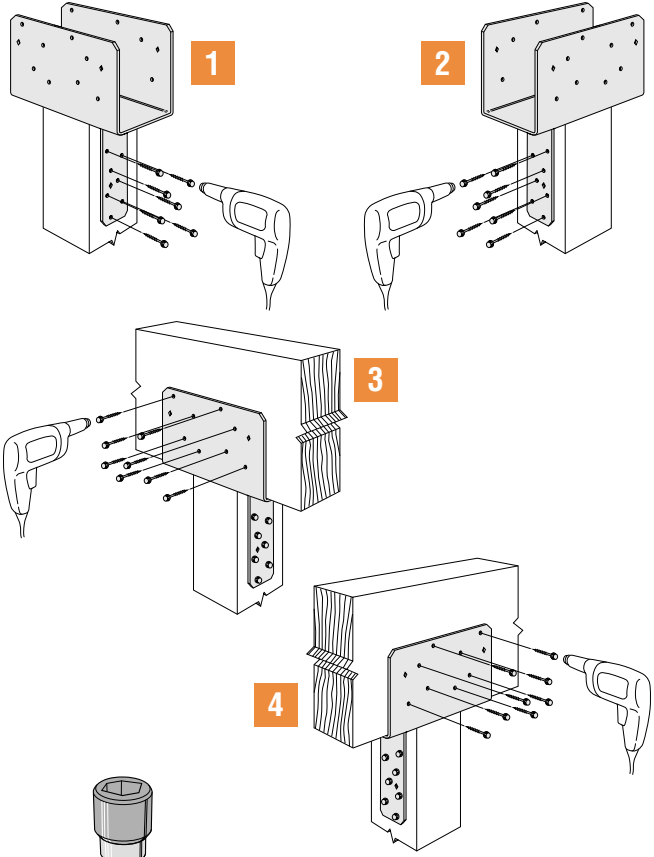
Beam or Column Width Ancho de Dintel o de Columna	Machine Bolt Size Tamaño del Perno Torneado	
	Diameter Diámetro	Length Longitud
3⅛"	⅝"	4½"
3½"	⅝"	4½"
5⅛"	¾"	6½"
5½"	⅝"	6½"
6¾"	¾"	8"
7"	¾"	8"
7½"	¾"	8½"
8¾"	¾"	10"
9½"	¾"	10½"

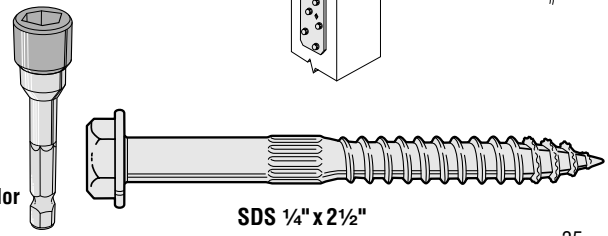


Bolt holes must be a minimum of 1⁄32" and a maximum of 1⁄16" larger than bolt diameter.

Los orificios para los pernos deben ser al menos 1⁄32" y como máximo 1⁄16" más grandes que el diámetro del perno.

CCQ



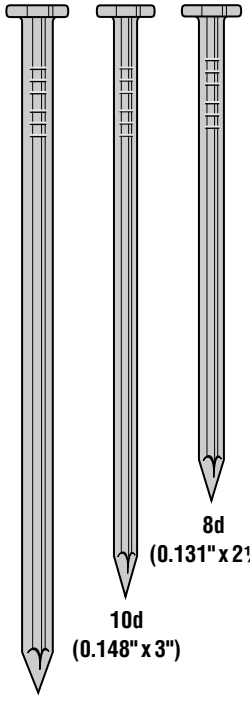


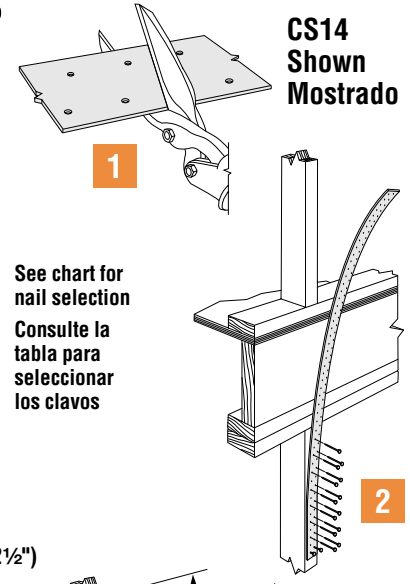
Use ⅜" driver

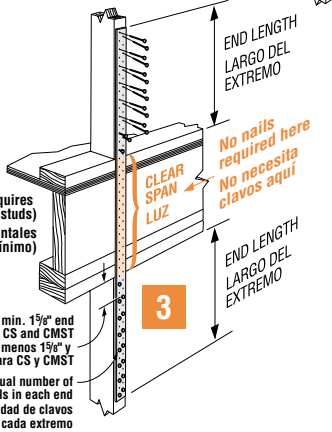
Use un destornillador de ⅜"

SDS ¼" x 2½"

CS/CMST14

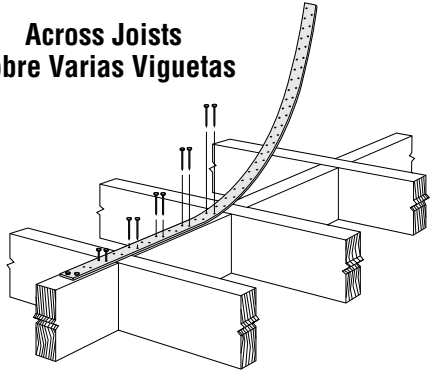





END LENGTH
LARGO DEL EXTREMO
No nails required here
No necesita clavos aquí
CLEAR SPAN
LUZ
(CMST requires minimum 2-2x studs)
(CMST requiere puntales de 2-2x como mínimo)
END LENGTH
LARGO DEL EXTREMO
3
Provide min. 1⅝" end distance for CS and CMST
Dejar al menos 1⅝" y distancia para CS y CMST
Equal number of specified nails in each end
Igual cantidad de clavos especificados en cada extremo

CS/CMST14

Across Joists
Sobre Varias Viguetas



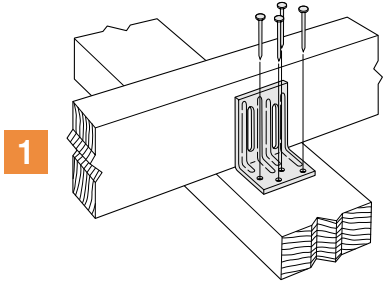
Model/ Modelo	Lumber Species / Especies de Madera					
	Douglas Fir-Larch/Southern Pine			Spruce-Pine-Fir/HemFir		
	End Length/ Largo del Extremo	Cut Length/ Largo a Cortar	Total Fasteners/ Total de Clavos	End Length/ Largo del Extremo	Cut Length/ Largo a Cortar	Total Fasteners/ Total de Clavos
CS14 CS14-R	15"	Clear Span (Luz)+30"	26-10d	16"	Clear Span (Luz)+32"	30-10d
	16"	Clear Span (Luz)+32"	30-8d	19"	Clear Span (Luz)+38"	36-8d
CS16 CS16-R	13"	Clear Span (Luz)+26"	22-8d	14"	Clear Span (Luz)+28"	26-8d
	11"	Clear Span (Luz)+22"	20-10d	12"	Clear Span (Luz)+24"	22-10d
CS18S CS18S CS18-R	11"	Clear Span (Luz)+22"	18-8d	12"	Clear Span (Luz)+30"	22-8d
	9"	Clear Span (Luz)+18"	16-10d	10"	Clear Span (Luz)+24"	18-10d
CS20 CS20-R	9"	Clear Span (Luz)+18"	14-8d	9"	Clear Span (Luz)+18"	16-8d
	6"	Clear Span (Luz)+16"	12-10d	8"	Clear Span (Luz)+16"	14-10d
CS22 CS22-R	6"	Clear Span (Luz)+16"	14-8d	8"	Clear Span (Luz)+20"	14-8d
	5"	Clear Span (Luz)+14"	12-10d	7"	Clear Span (Luz)+18"	12-10d
CMST14	26"	Clear Span (Luz)+52"	56-16d	30"	Clear Span (Luz)+66"	66-16d
	30"	Clear Span (Luz)+60"	66-10d	34"	Clear Span (Luz)+76"	76-10d

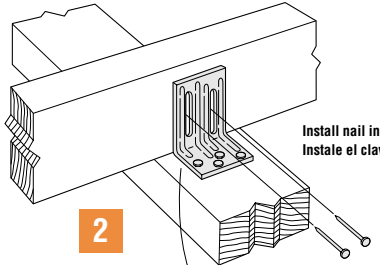
NOTE: Install half of the total fasteners in each end of strap.
NOTA: Instale la mitad de la cantidad total de sujetadores en cada extremo del fleje.

Clear Span = Luz

DTC

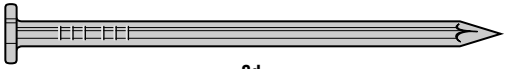
SIMPSON Strong-Tie





Install nail in center of slot
Instale el clavo en el centro de la ranura

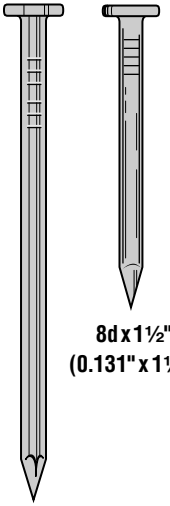
Truss nails not driven flush
Los clavos de la cercha no deberían asentarse contra el conector



8d
(0.131" x 2½")

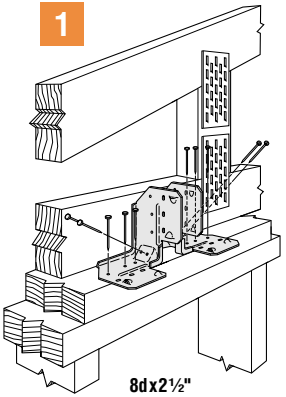
GBC

SIMPSON Strong-Tie

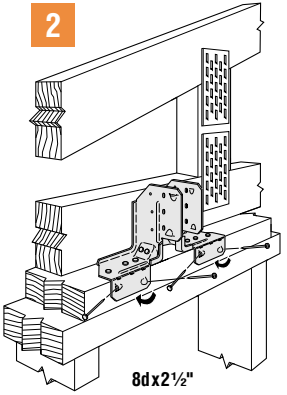


8d x 1½"
(0.131" x 1½")

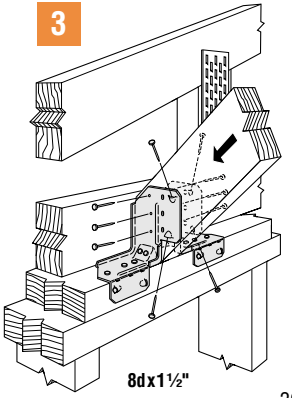
8d
(0.131" x 2½")



8d x 2½"

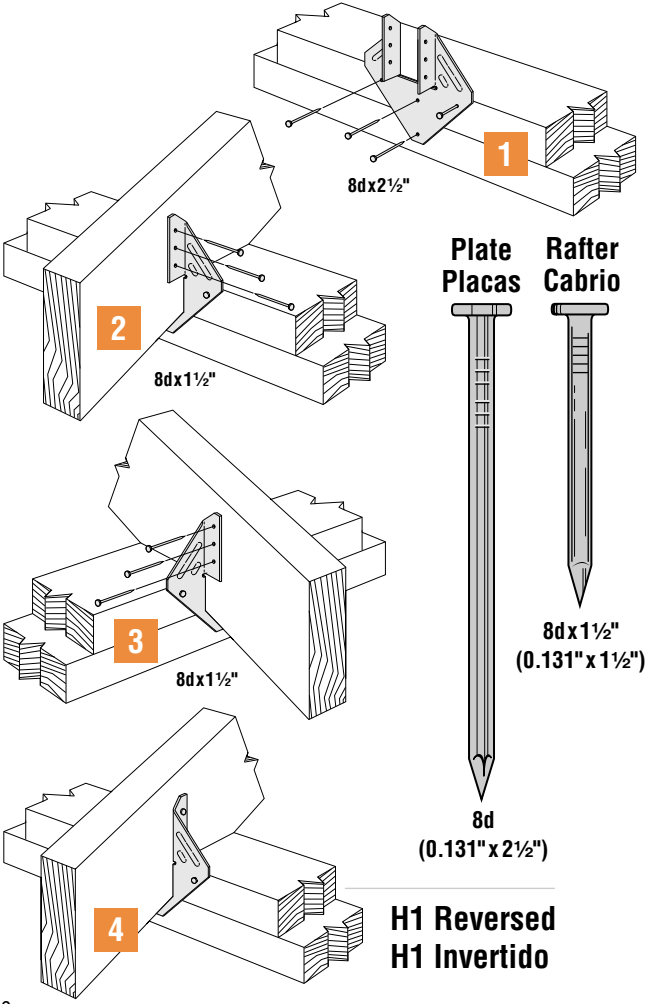


8d x 2½"



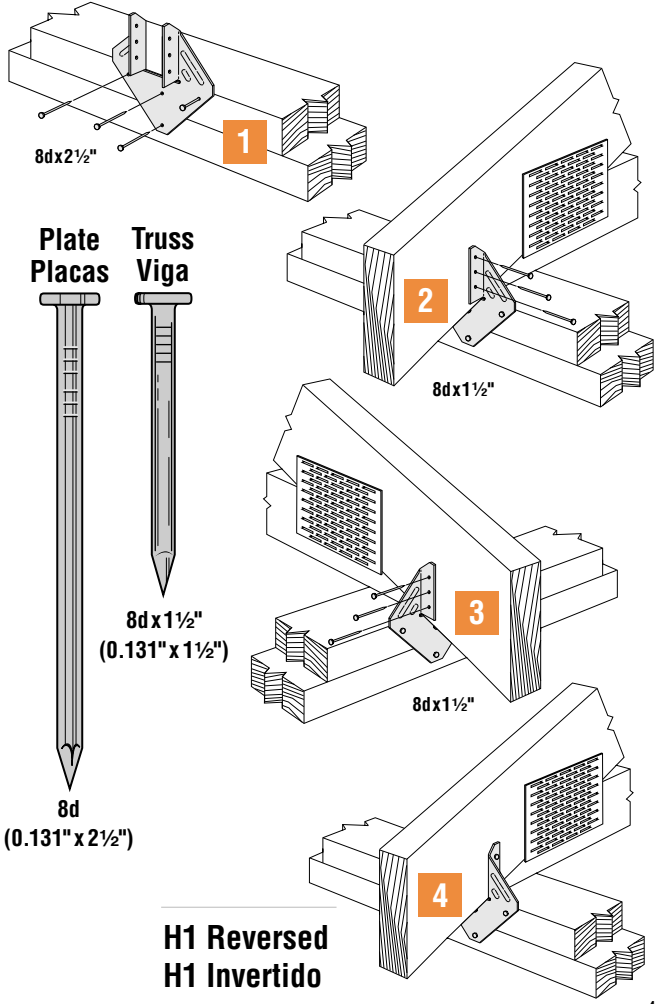
8d x 1½"

H1 – Rafter/Cabrio



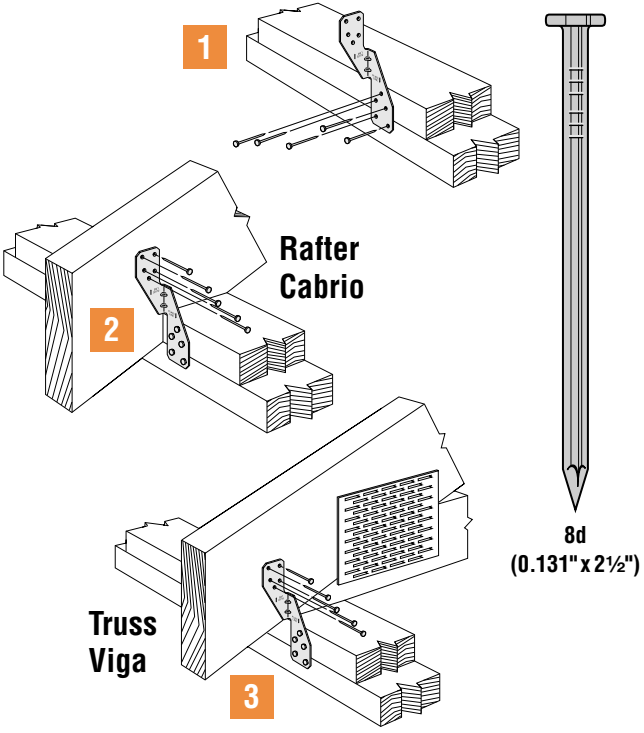
H1 Reversed
H1 Invertido

H1 – Truss/Viga



H1 Reversed
H1 Invertido

H2.5A



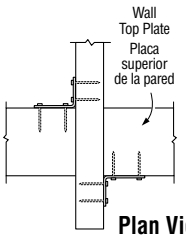
8d
(0.131" x 2½")

Installations in Pairs

Both connectors shall be same model.

Instalaciones en Pares

Ambos conectores deben ser del mismo modelo.

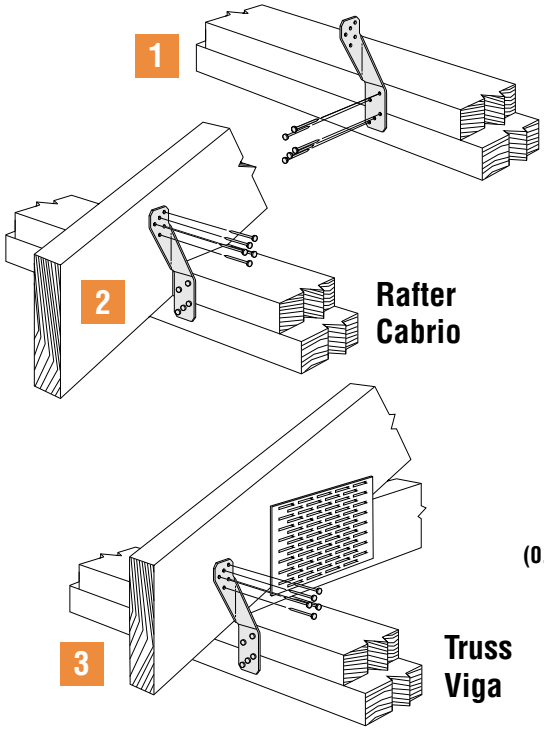


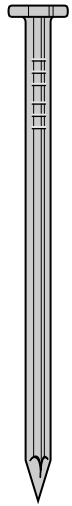
Plan View/Vista de Planta

Install diagonally across from each other for minimum 2x truss.

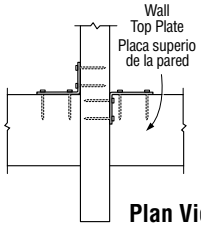
Instale diagonal-mente uno respecto del otro para dejar una cercha de 2x como mínimo.

H2.5T





8d
(0.131" x 2½")

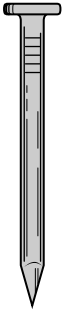


Plan View/Vista de Planta

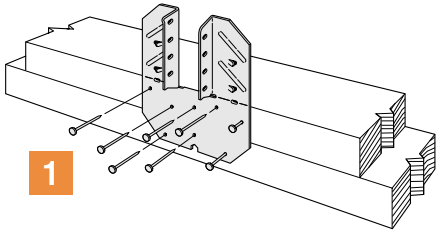
Products can be on the same side of the wall provided they are configured as shown.

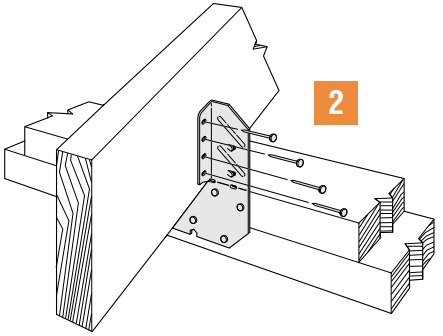
Los productos se pueden instalar a ambos lados de la pared siempre que se configuren como se muestra.

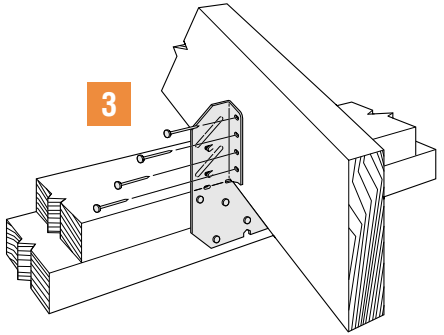
H10 – Rafter/Cabrio



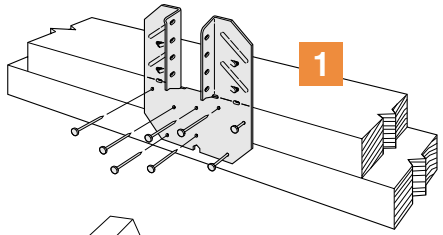
8d x 1½"
(0.131" x 1½")

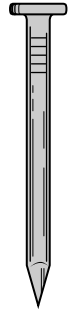




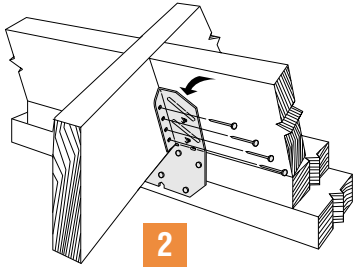


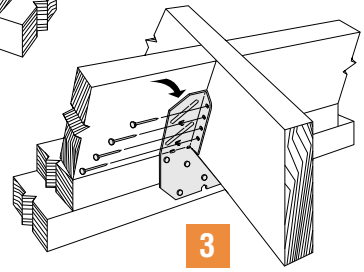
H10 – Blocking/Entramado

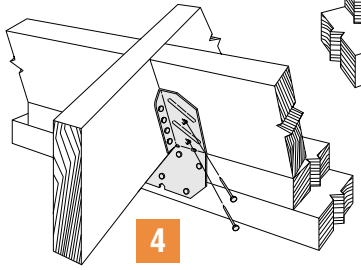


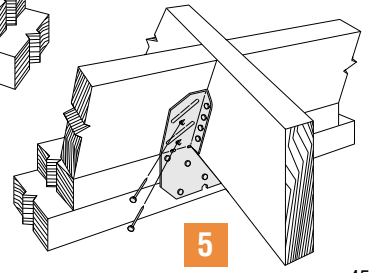


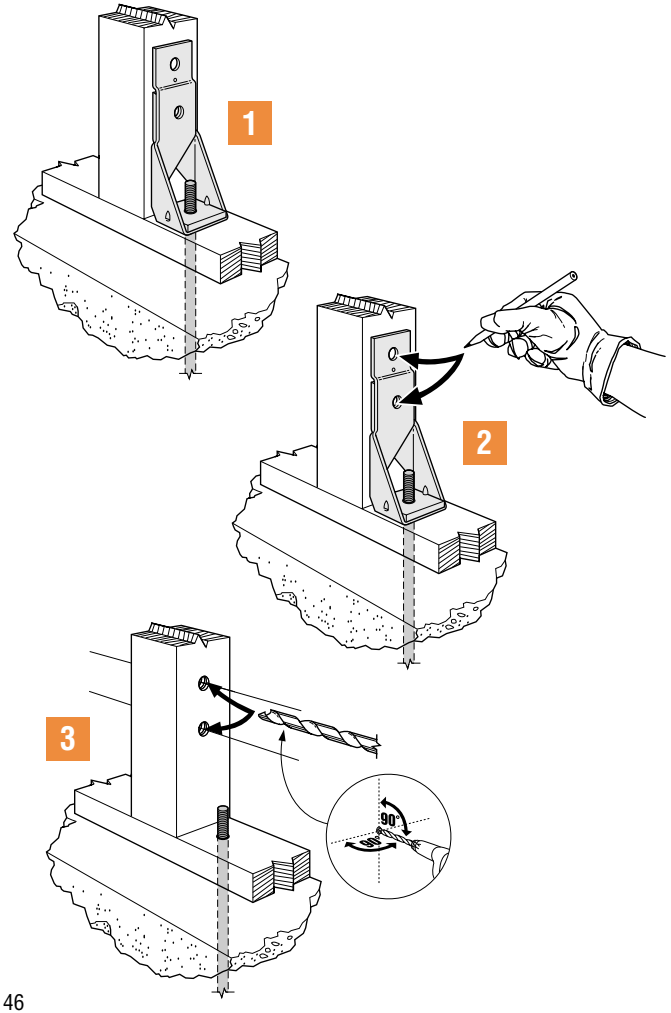
8d x 1½"
(0.131" x 1½")



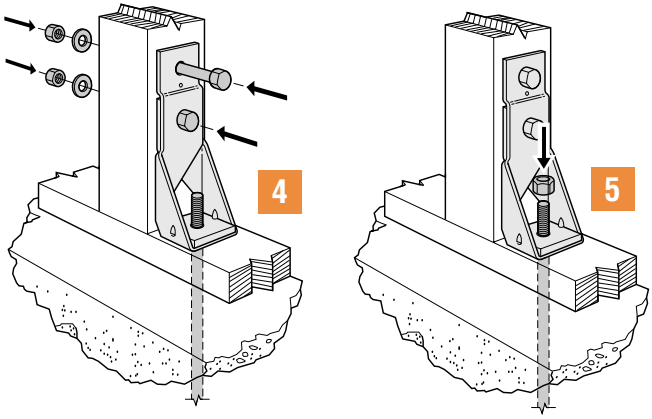


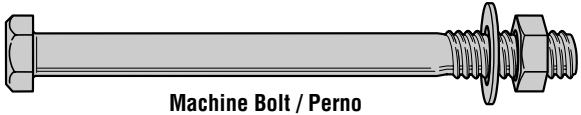






HDA – Machine Bolts/Pernos ⅝-1"





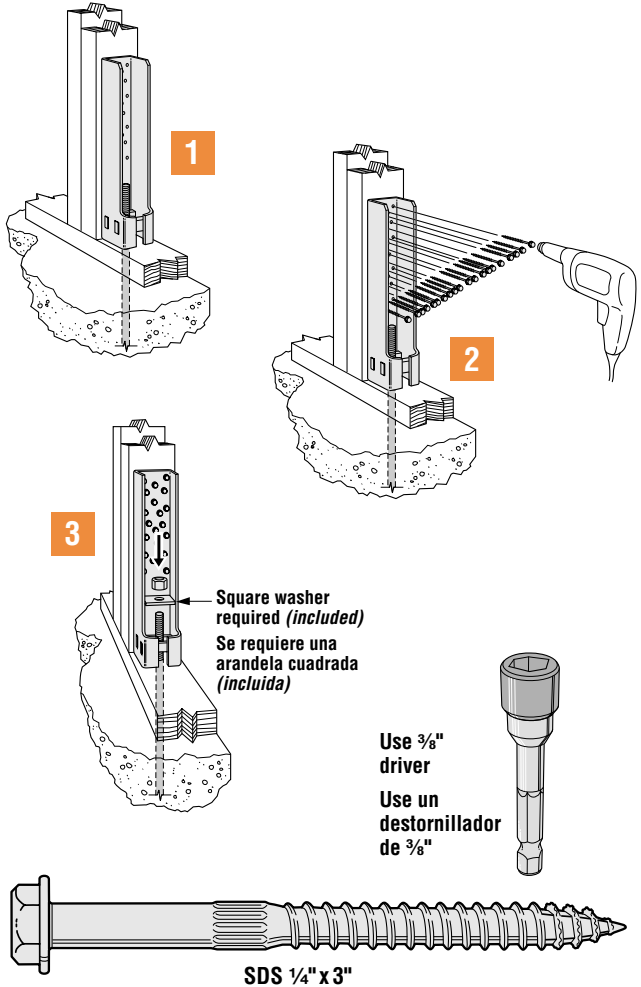
Machine Bolt / Perno

Model No./ N.º de Modelo	Machine Bolt Diameter/ Diámetro del Perno Torneado
HD2A	⅝"
HD5A	¾"
HD6A	⅞"
HD8A	⅞"
HD10A	⅞"
HD14A	1"

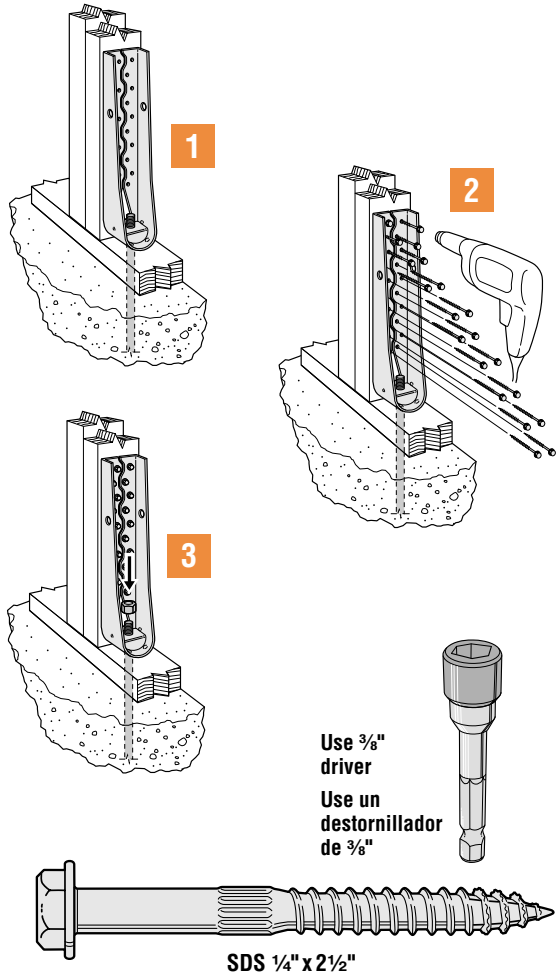
Machine bolts should be at least 1" longer than wood member thickness.
Bolt holes must be a minimum of 1/32" and a maximum of 1/16" larger than bolt diameter.

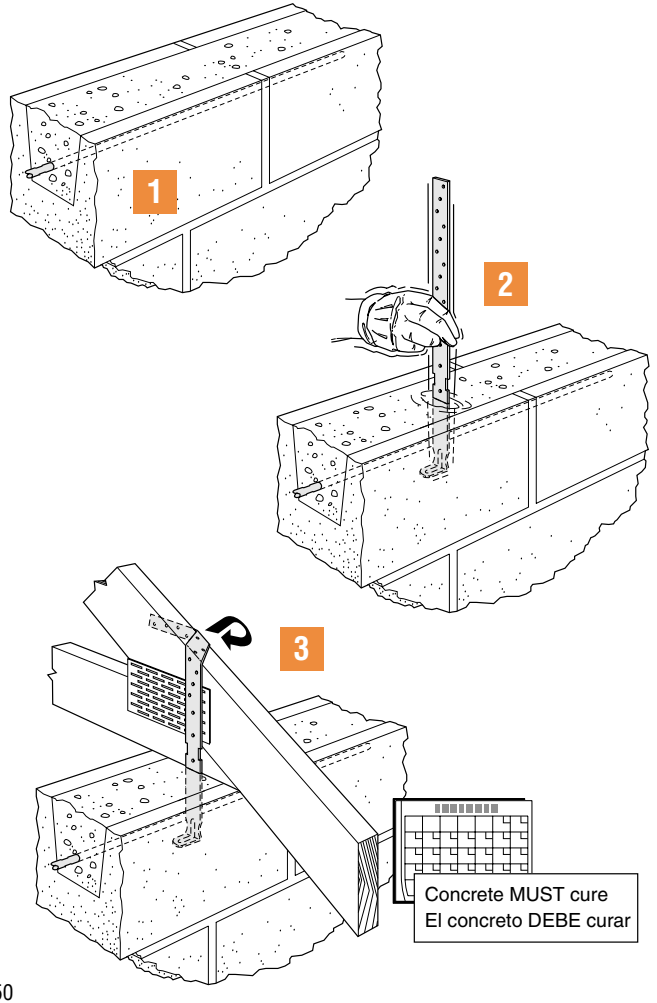
Los pernos torneados deben ser al menos 1" más largos que el espesor de los miembros de madera.
Los orificios para los pernos deben ser al menos 1/32" y como máximo 1/16" más grandes que el diámetro del perno.

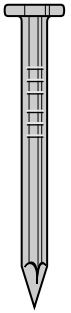
HDQ8


1
2
3
Square washer required *(included)*
Se requiere una arandela cuadrada *(incluida)*
Use ⅜" driver
Use un destornillador de ⅜"
SDS ¼" x 3"
(Included / Incluida)

HDU


1
2
3
Use ⅜" driver
Use un destornillador de ⅜"
SDS ¼" x 2½"
(Included / Incluida)

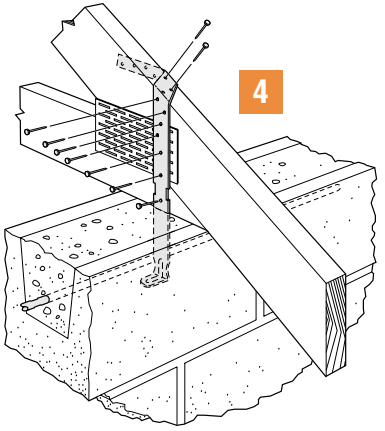


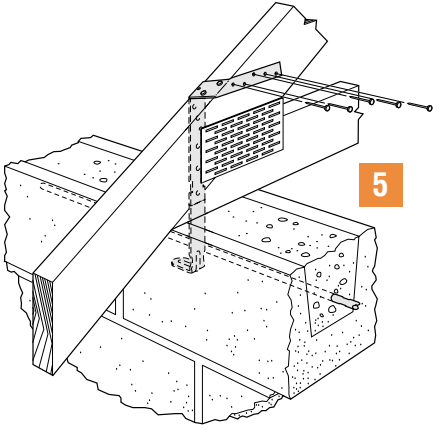


10d x 1½"
(0.131" x 1½")

Quantity per Designer

Cantidad según indicaciones del diseñador





HPAHD22

SIMPSON Strong-Tie

1a

Nailed to block on form
Clavado al bloque en forma

or/ó

StrapMate® strap holder (SM1)

1b

Attached with StrapMate® strap holder

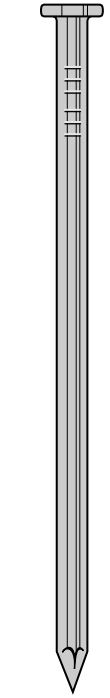
Fijar con sujetador de abrazadera StrapMate®

2

Concrete MUST cure
El concreto DEBE curar

HPAHD22

SIMPSON Strong-Tie



16d
(0.162" x 3½")

3a

Strap may be bent down and back up one time only

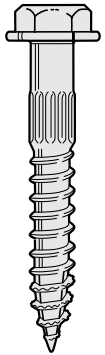
La abrazadera se puede doblar hacia abajo y hacia arriba sólo una vez

or/ó

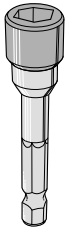
Reduced loads apply. Check with Designer before nailing over sheathing

Se aplican cargas reducidas. Consulte al diseñador antes de clavar sobre relleno

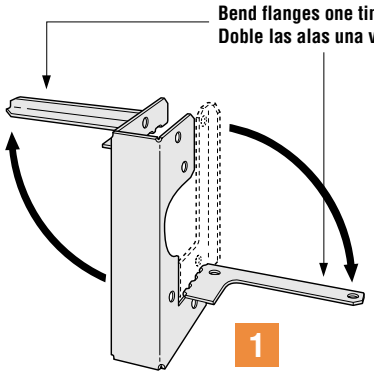
3b

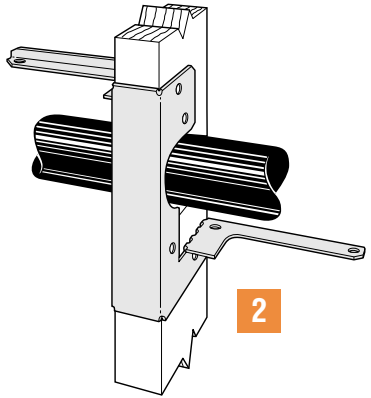


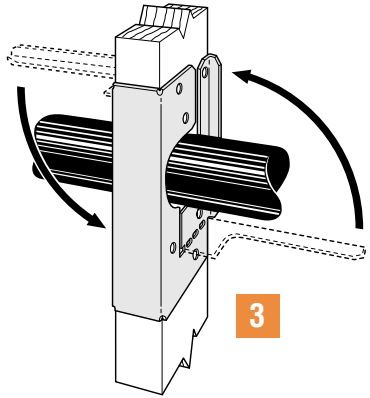
SDS ¼" x 1½"

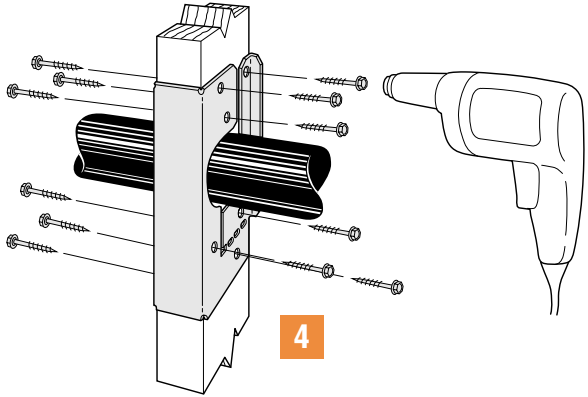


Use ⅜" driver
Use un destornillador de ⅜"

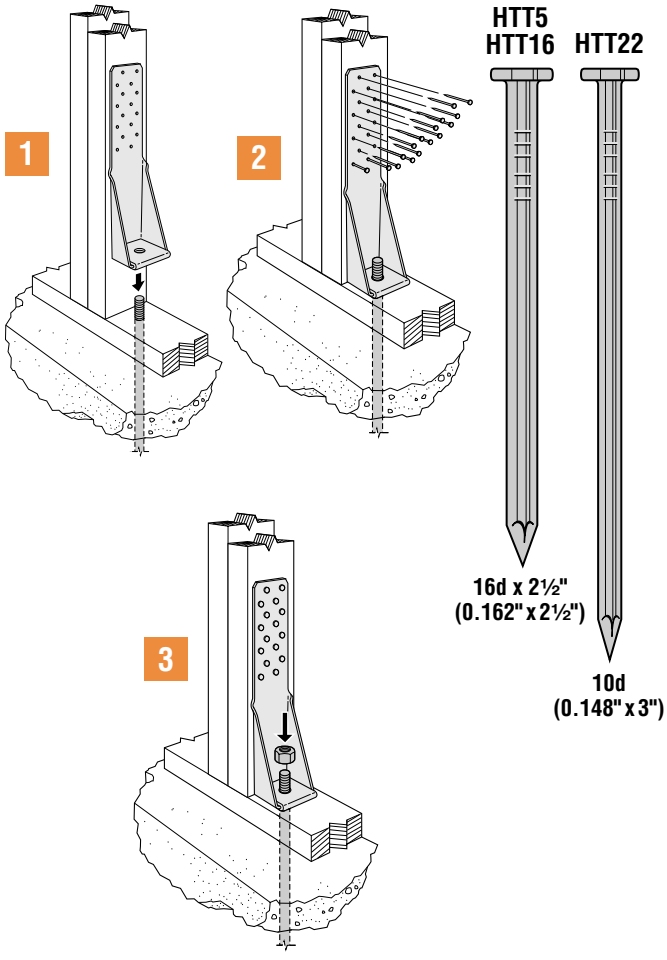




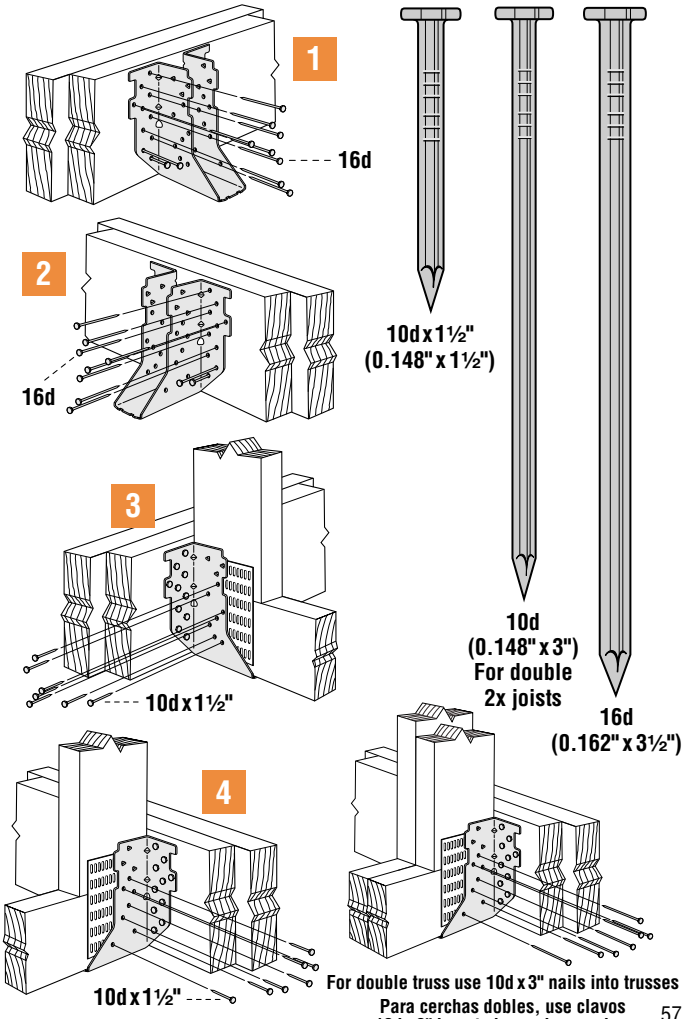


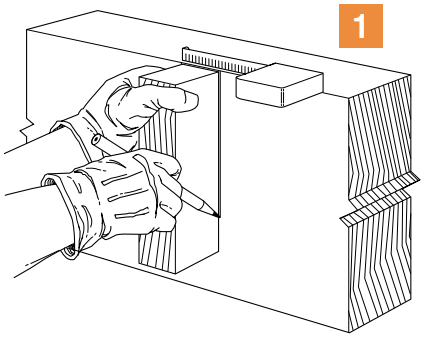


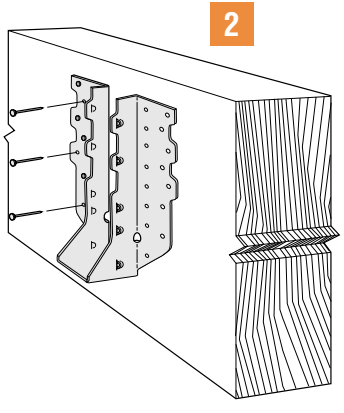
HTT

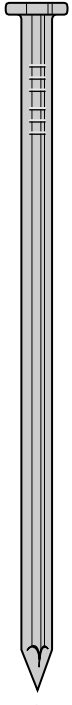

1
2
3
HTT4
HTT5
HTT16
HTT22
16d x 2½"
(0.162" x 2½")
10d
(0.148" x 3")

HTU

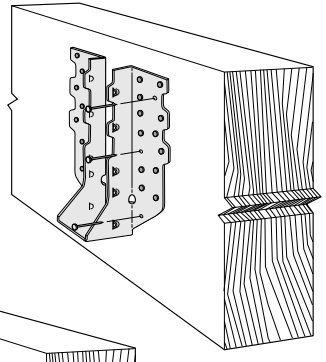

1
16d
2
16d
10d x 1½"
(0.148" x 1½")
3
10d x 1½"
10d
(0.148" x 3")
For double
2x joists
16d
(0.162" x 3½")
4
10d x 1½"
For double truss use 10d x 3" nails into trusses
Para cerchas dobles, use clavos
10d x 3" insertados en las cerchas

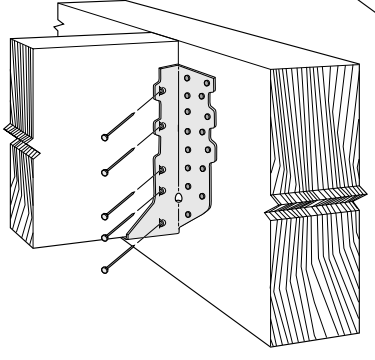


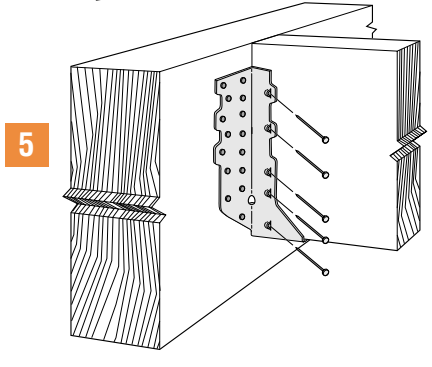


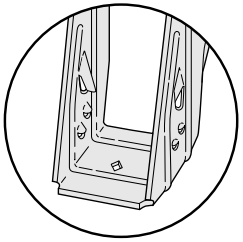


16d
(0.162" x 3½")



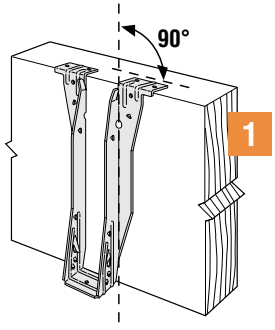


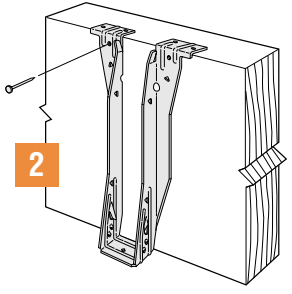


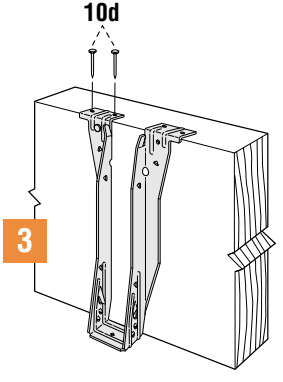


The Strong-Grip™ seat allows the I-joist to "snap" in securely – no joist nails needed.

El asiento Strong-Grip™ permite que la viga 'I' "encaje" con firmeza; no se necesitan clavos para vigas.

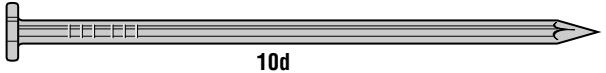




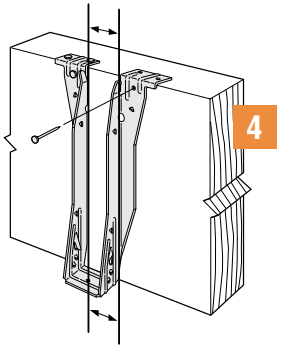


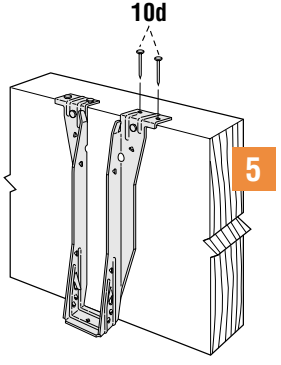
See pages 14-15 for more information.

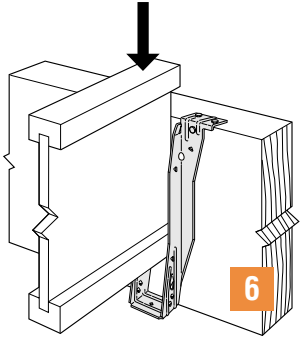
Vea la página 14-15 para más información.

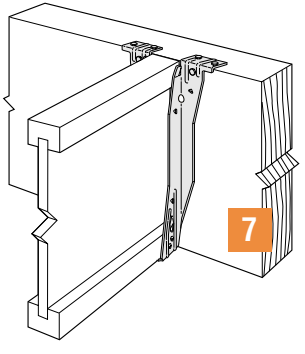


10d
(0.148" x 3")





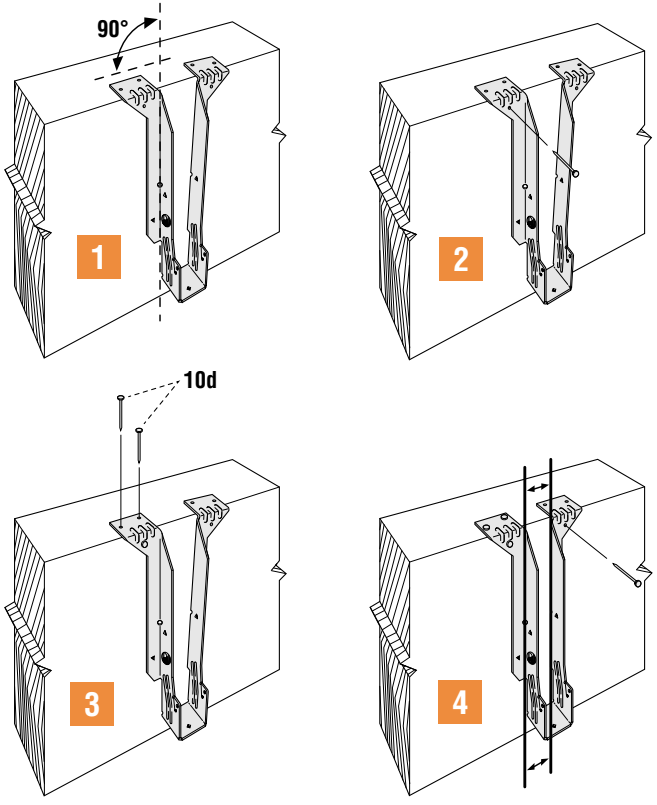




No nails required in joist

No es necesario clavar clavos en la viga

ITT



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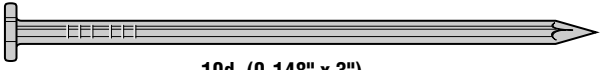
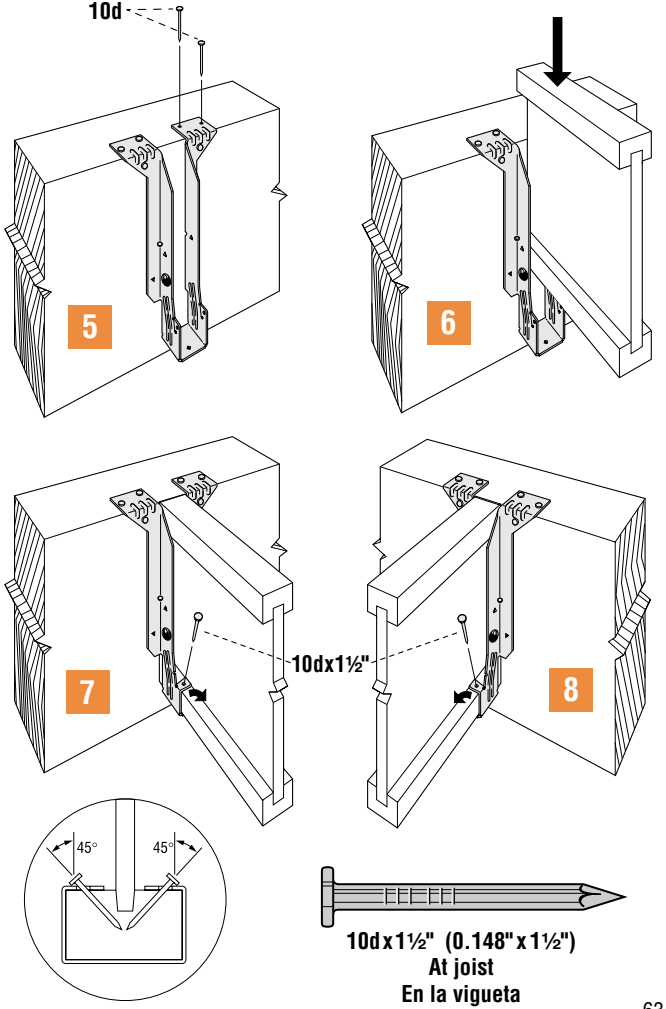


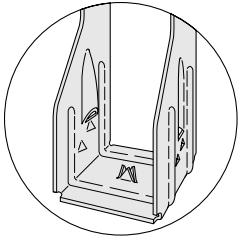
10d (0.148" x 3")
On top and face by header
Encima y en la cara de la viga cabezal

ITT



10d x 1½" (0.148" x 1½")
At joist
En la vigueta

IUS



The Strong-Grip™ seat allows the I-joist to "snap" in securely – no joist nails needed.

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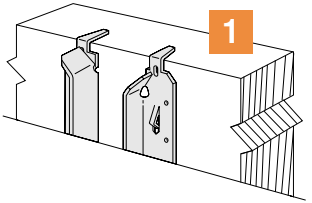

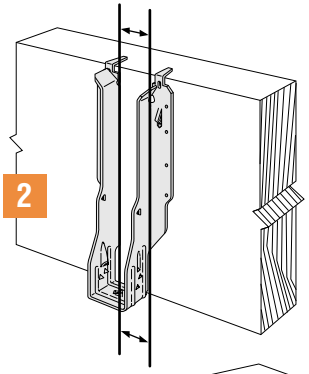

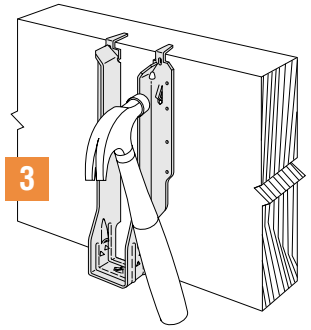

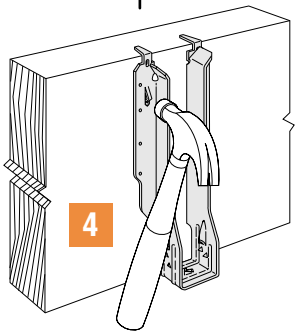

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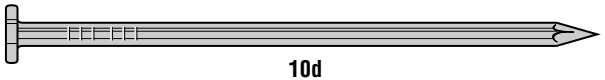
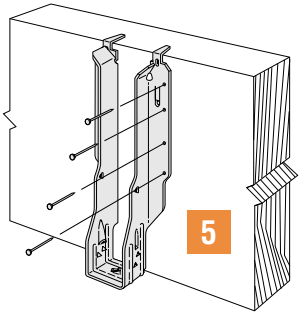
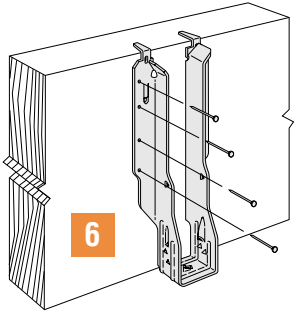
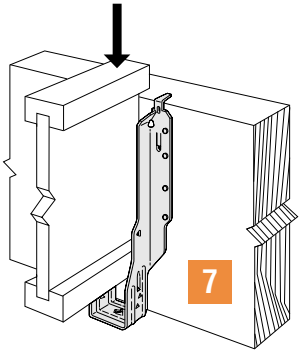


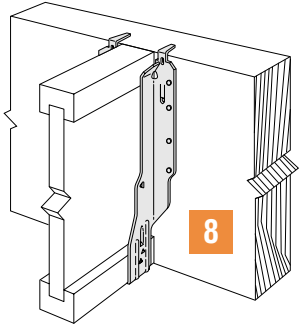
10d
(0.148" x 3")

IUS







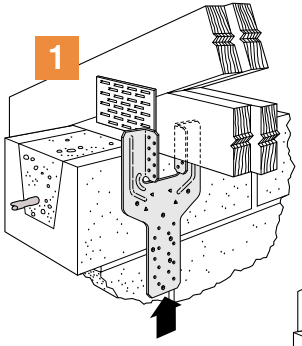


No nails required in joist

No es necesario clavar clavos en la viga

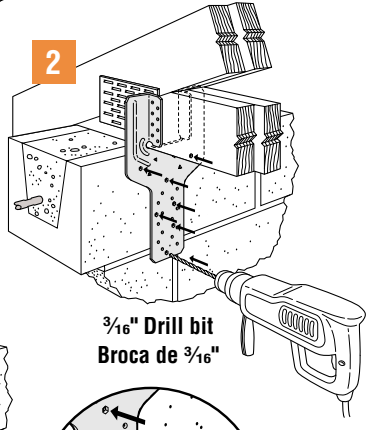
LGT2

SIMPSON Strong-Tie®

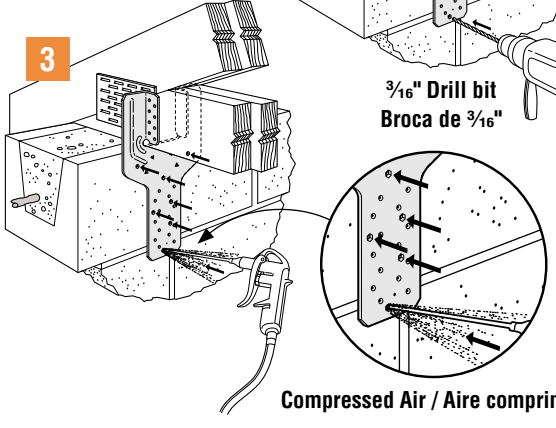


Fill ⬡ holes with
Titen® masonry screws

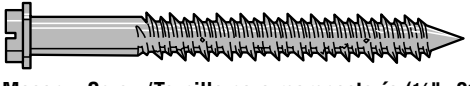
Llene los orificios ⬡ con tornillos para mampostería Titen®



3/16" Drill bit
Broca de 3/16"



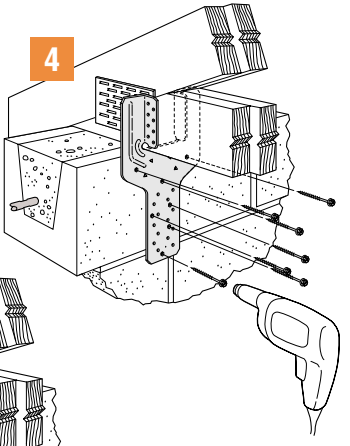
Compressed Air / Aire comprimido

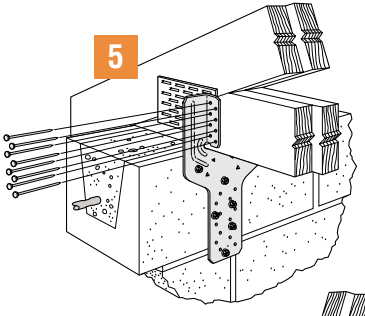


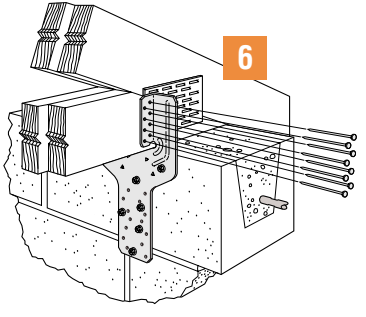
Titen® Masonry Screw/Tornillo para mampostería (¼" x 2¼")
For installation in concrete use Titen ¼" x 1¾"
Para instalaciones en concreto, utilice Titen de ¼" x 1¾"

LGT2

SIMPSON Strong-Tie®

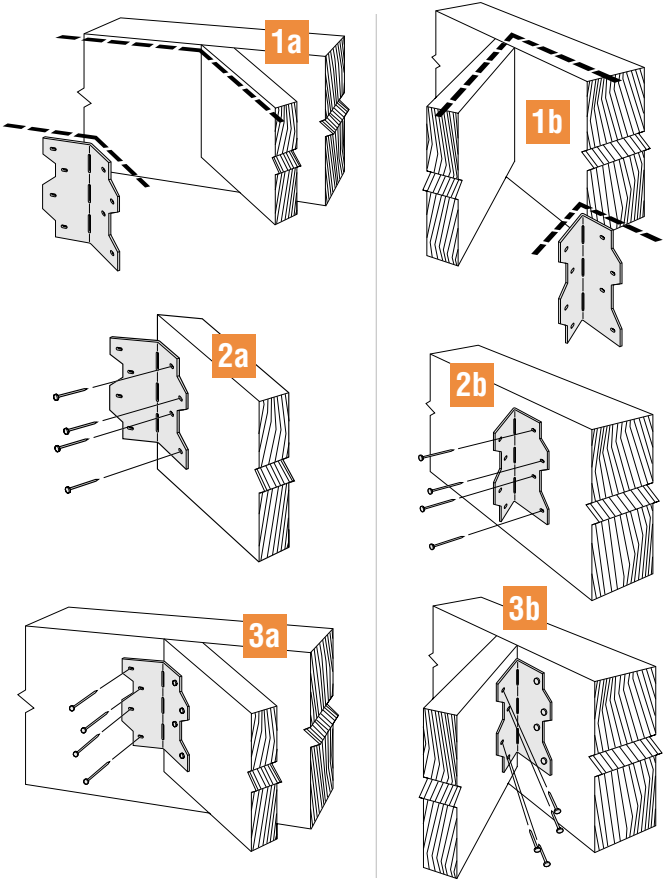


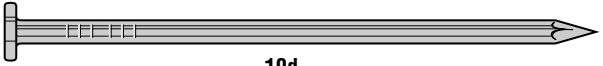




16d Sinker
(0.148" x 3¼")

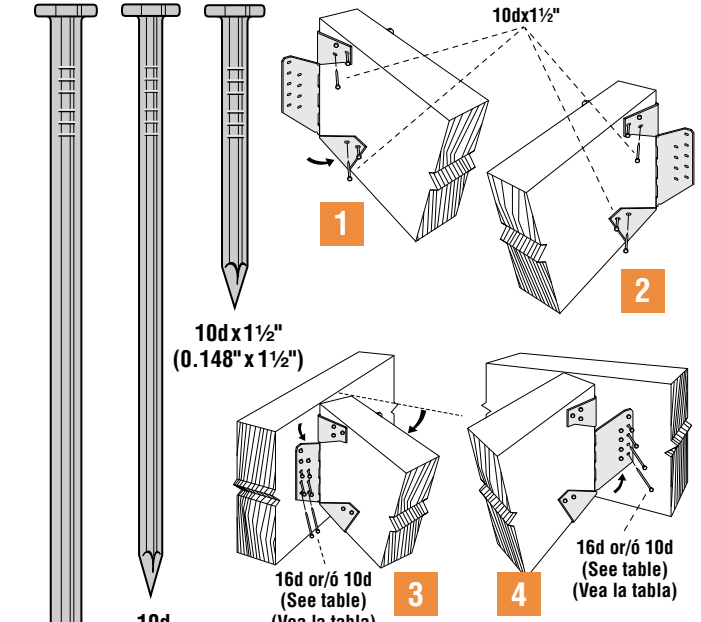
LS





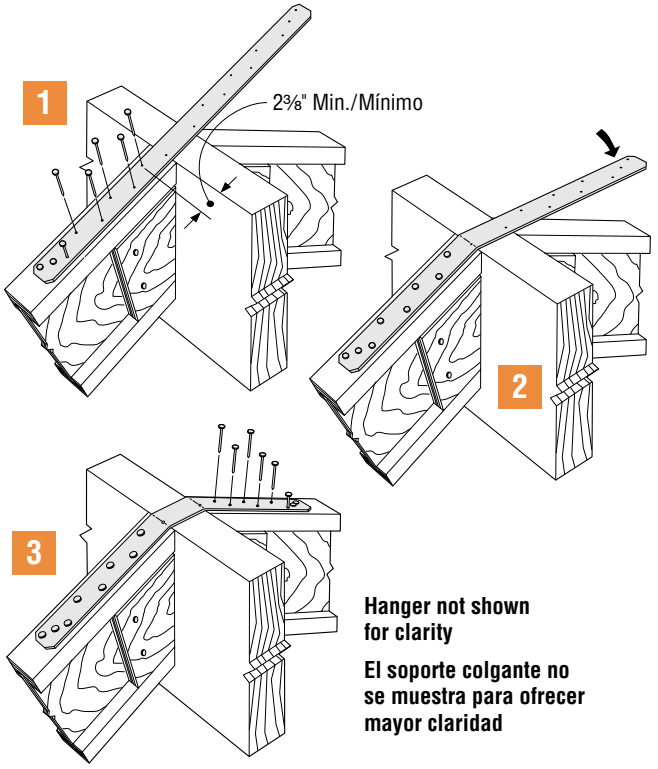
10d
(0.148" x 3")

LSSU



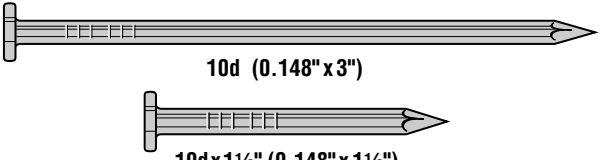
Joist Width Ancho de Vigueta	Model Modelo	Nails / Clavos	
		Face / Cara	Joist / Viga
Sloped Only Hangers / Sólo Conectores Sesgados			
1½	LSSU28	10-10d	5-10dx1½
1½	LSSU210	10-10d	7-10dx1½
2½	LSSUH310	18-16d	12-10dx1½
3	LSSU210-2	18-16d	12-10dx1½
3½	LSSU410	18-16d	12-10dx1½
Skewed Hangers or Sloped and Skewed Conectores Sesgados o Con Sego y Pendiente			
1½	LSSU28	9-10d	5-10dx1½
1½	LSSU210	9-10d	7-10dx1½
2½	LSSUH310	14-16d	12-10dx1½
3	LSSU210-2	14-16d	12-10dx1½
3½	LSSU410	14-16d	12-10dx1½

LSTA



Hanger not shown for clarity

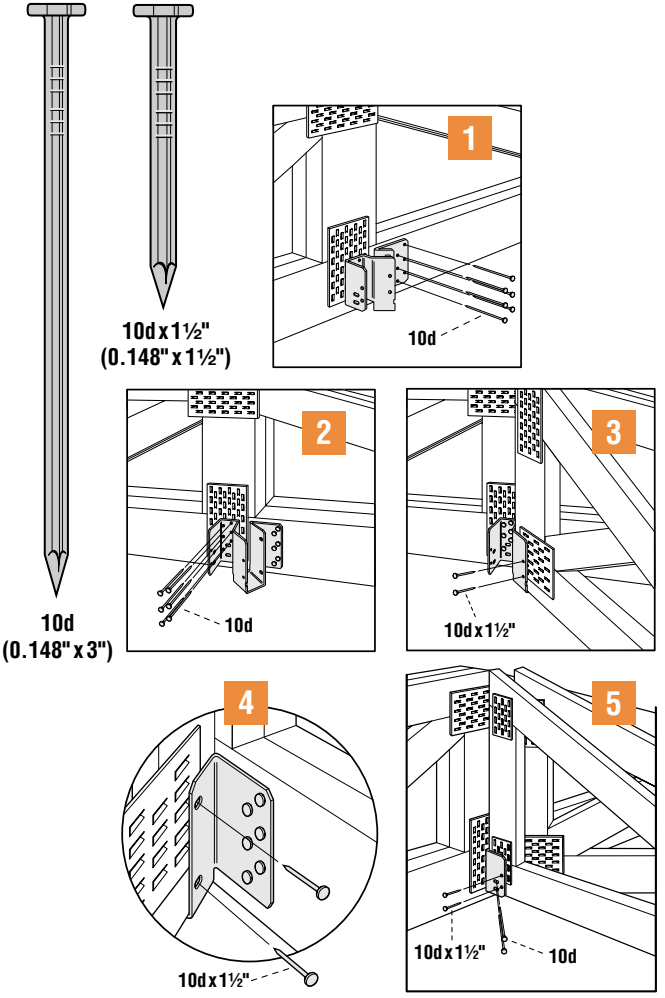
El soporte colgante no se muestra para ofrecer mayor claridad



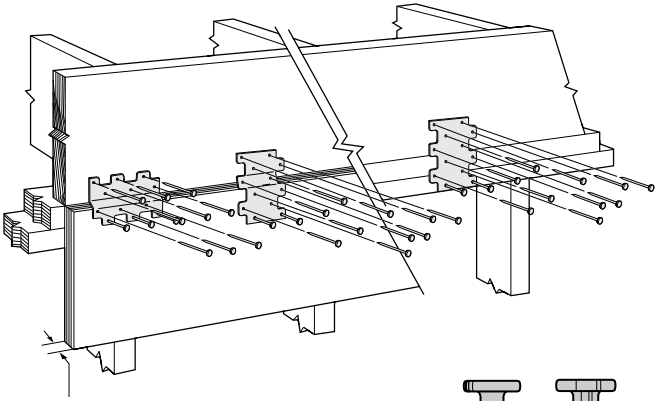
10d (0.148" x 3")

10d x 1½" (0.148" x 1½")
For I-joist installation only
Sólo para instalación de vigas en 'I'

LTHJR



LTP4/LTP5



Fasteners:

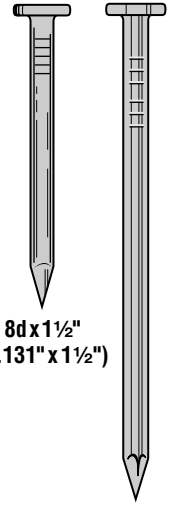
LTP4
No sheathing: 8dx1½"
Over sheathing (⅜" thick max.): 8dx2½"

LTP5
No sheathing: 8dx1½"
Over sheathing (½" thick max.): 8dx2½"

Sujetadores:

LTP4
Sin relleno: 8dx1½"
Sobre relleno (⅜" de espesor máx.): 8dx2½"

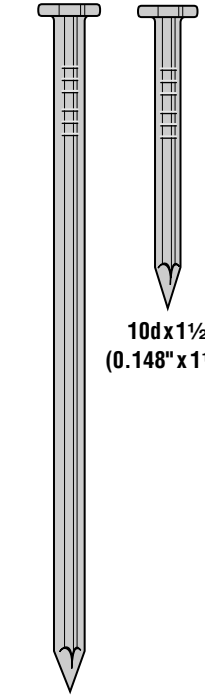
LTP5
Sin relleno: 8dx1½"
Sobre relleno (½" de espesor máx.): 8dx2½"



8dx1½"
(0.131"x1½")

8d
(0.131"x2½")

LUCZ

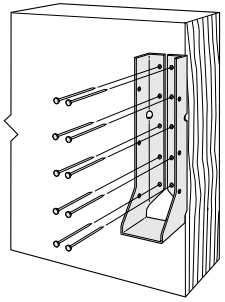


Header
Viga cabezal

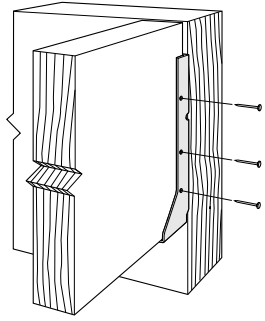
Joist
Viga

10dx1½"
(0.148"x1½")

16d
(0.162"x3½")



1



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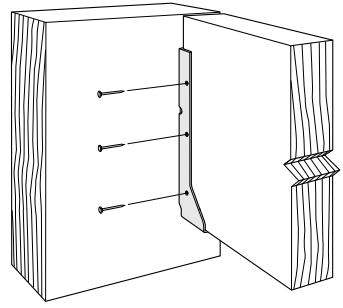

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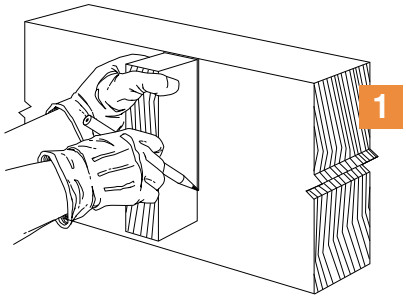
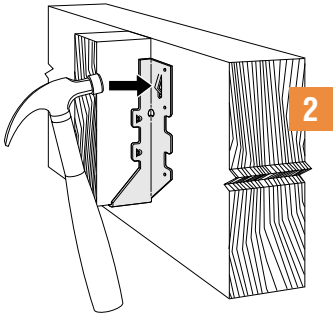
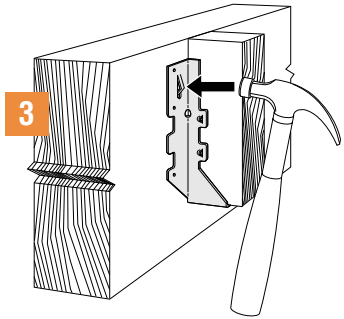
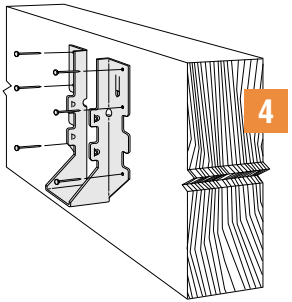
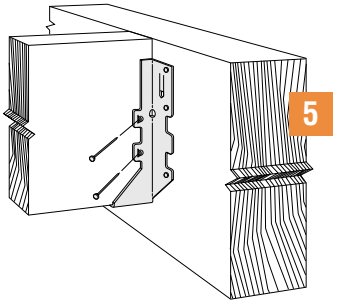
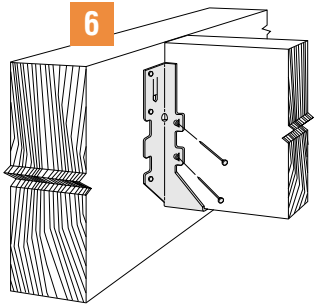


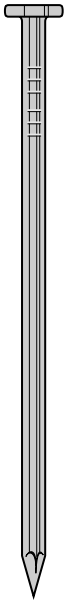




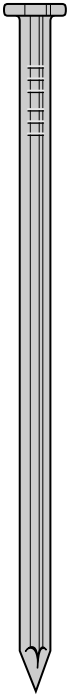






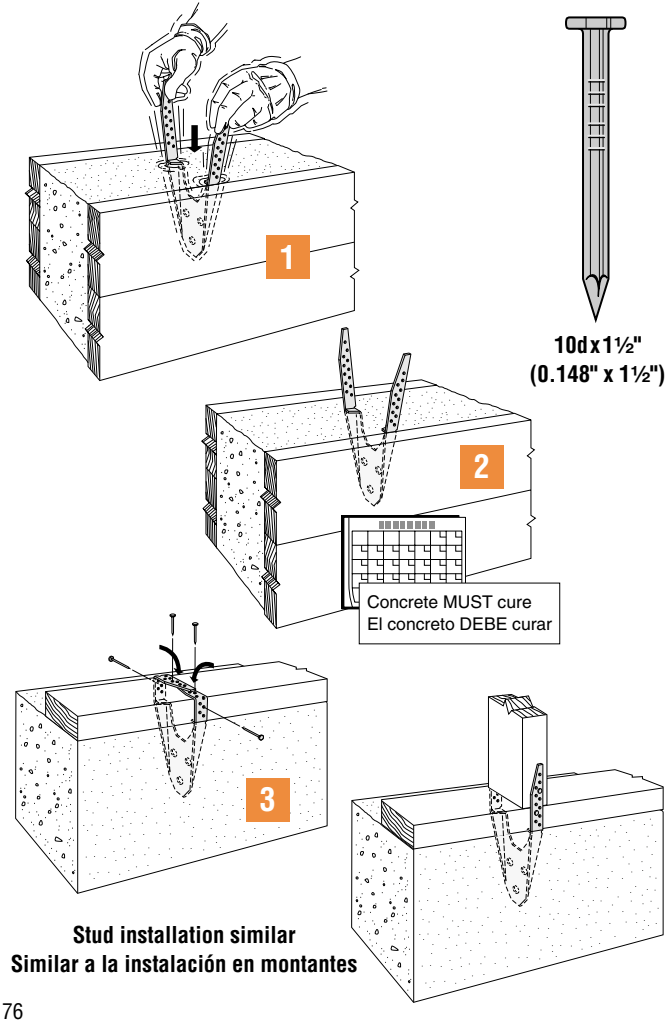


10d for single 2x
10d para un solo 2x
(0.148" x 3")



16d for all others
16d para los demás
(0.162" x 3½")

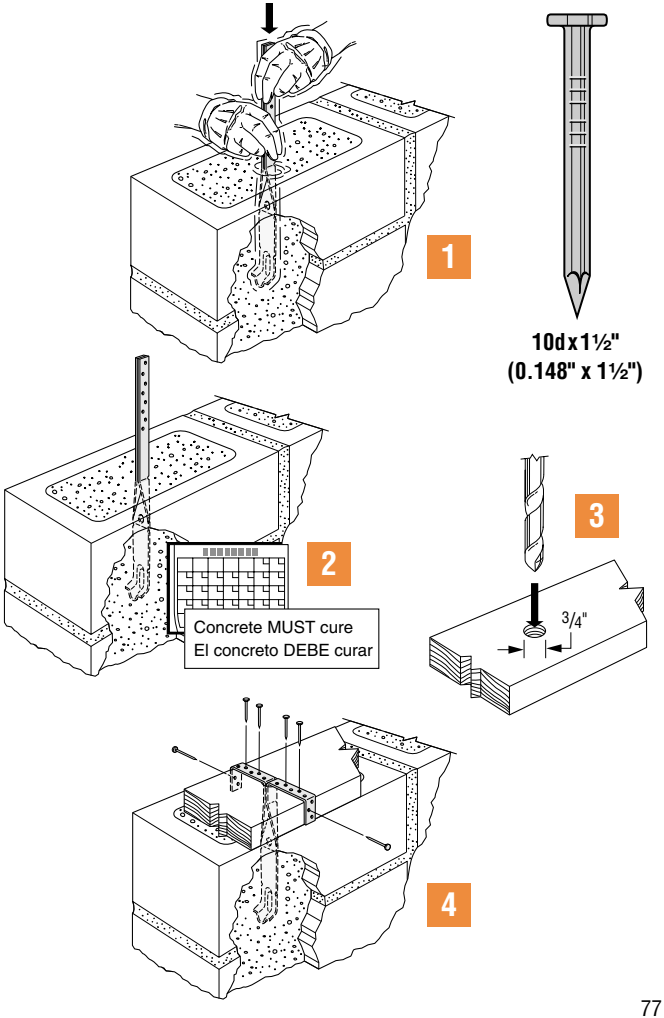
MA



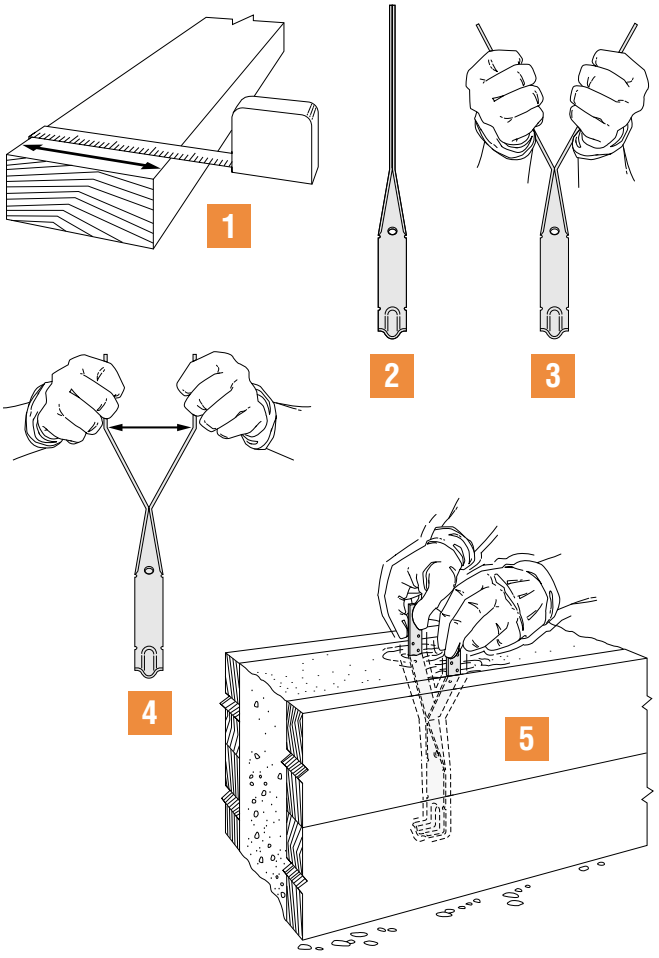
10d x 1½"
(0.148" x 1½")

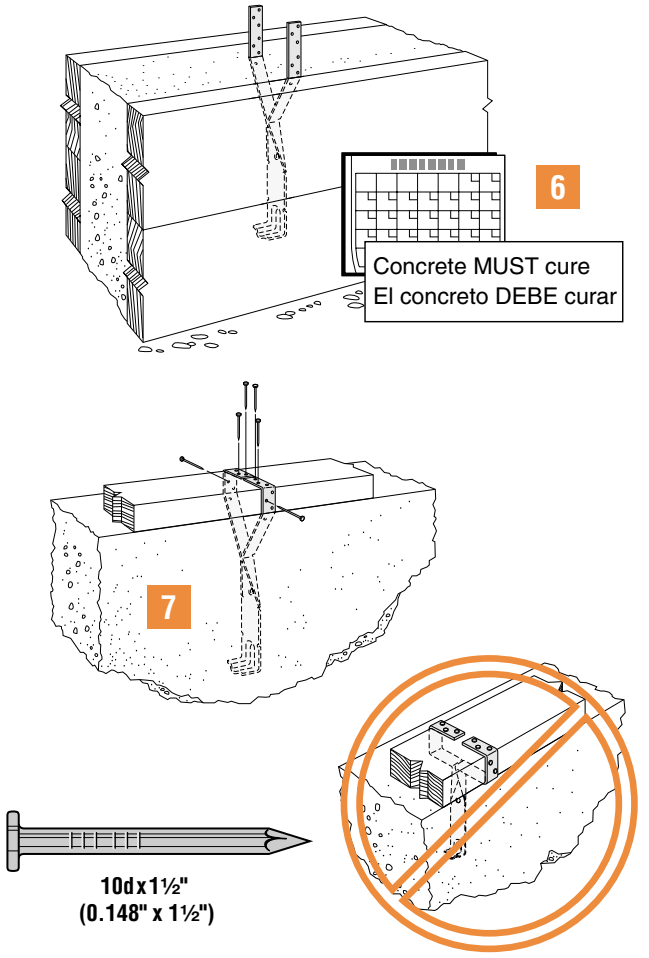
Stud installation similar
Similar a la instalación en montantes

MAB – Block/Bloque



10d x 1½"
(0.148" x 1½")


1
2
3
4
5


6
Concrete MUST cure
El concreto DEBE curar
7
10d x 1½"
(0.148" x 1½")

MASA/MAS

SIMPSON Strong-Tie

FORMING
ENCOFRADO

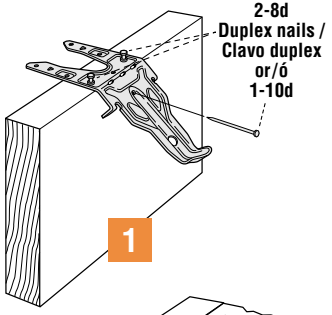
CONNECTOR
CONECTOR

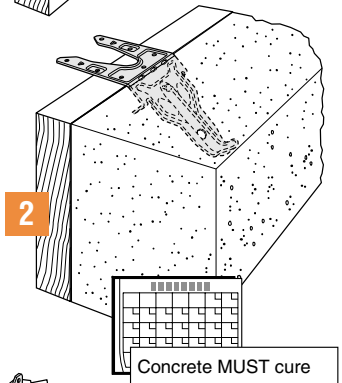
or/ó

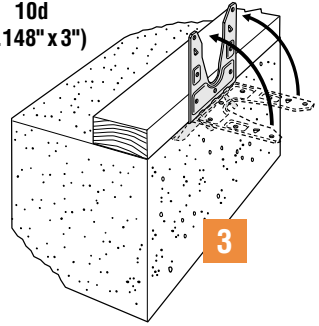
8d
Duplex

10d x 1½"
(0.148" x 1½")

10d
(0.148" x 3")

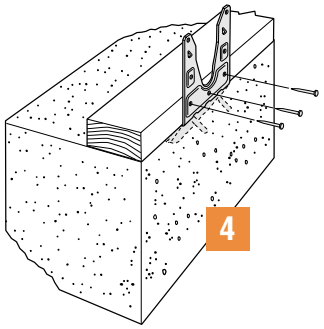


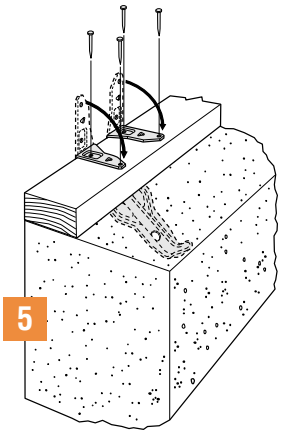




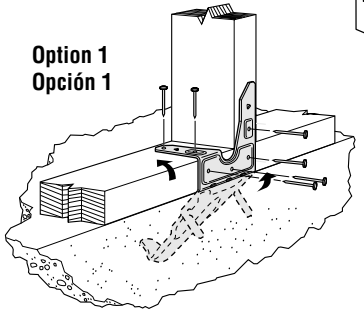
MASA/MAS

SIMPSON Strong-Tie





Option 1
Opción 1

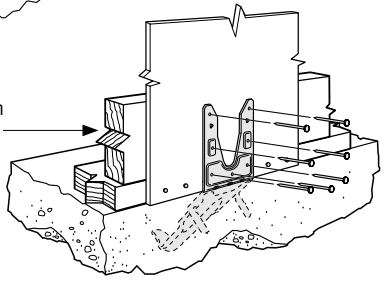


Reduced loads apply,
check with Designer

Se aplican cargas reducidas;
consulte al diseñador

Blocking required attached to sill with A35Z *(not shown)* or per Designer

Se debe adjuntar un bloqueo al larguero con A35Z *(no se muestra)* o según indicaciones del diseñador



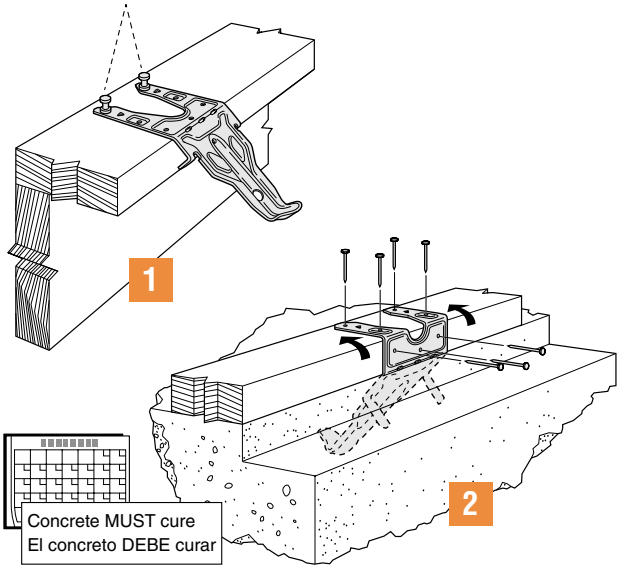
Option 2
Opción 2

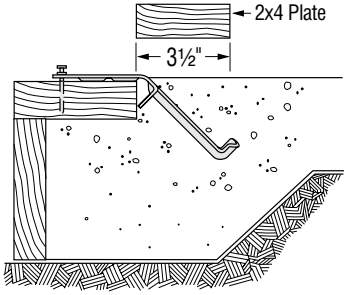
Reduced loads apply, check with Designer
before nailing over sheathing
Se aplican cargas reducidas; consulte al
diseñador antes de clavar sobre el relleno

MASA/MAS

Brick-Ledge Installation
Instalación Sobre Cornisa de Ladrillos

2-8d Duplex nails / Clavo duplex or/ó 1-10d

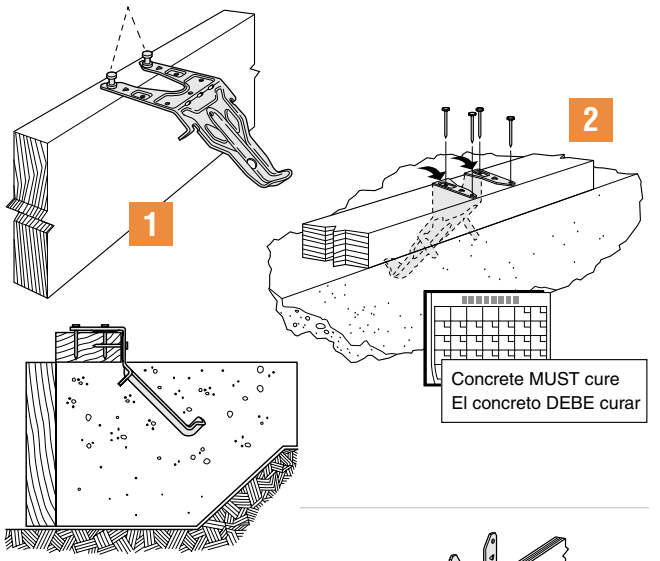




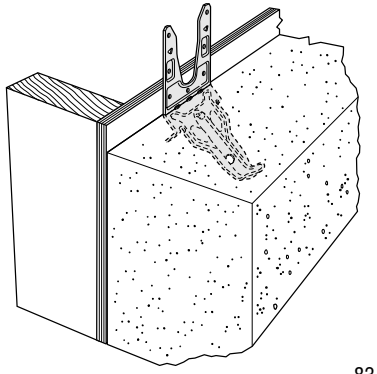
MASA/MAS

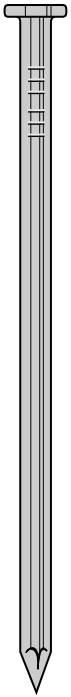
Inside-the-Mudsill Installation
Instalación en Solera

2-8d Duplex nails / Clavo duplex or/ó 1-10d

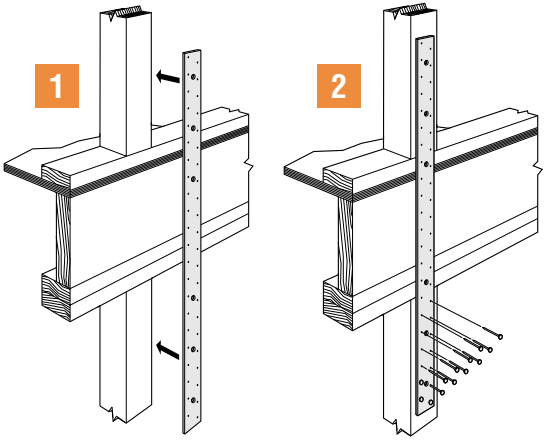


MASAP/MASP
Similar / Similar

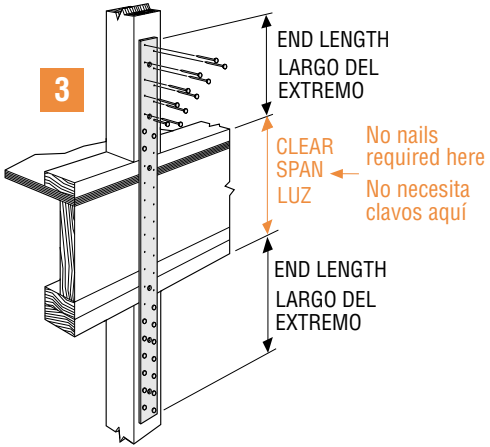


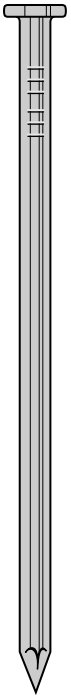


16d
(0.162" x 3½")

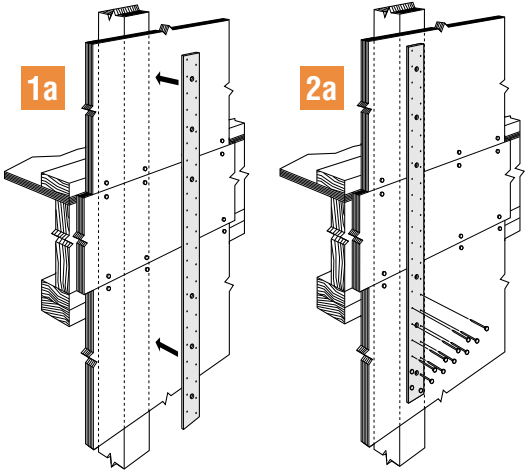


No sheathing / Sin relleno

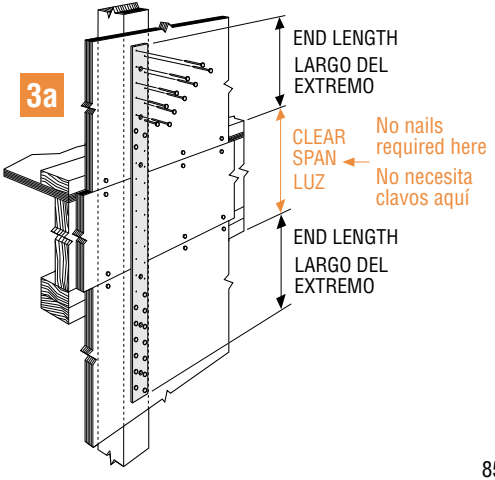




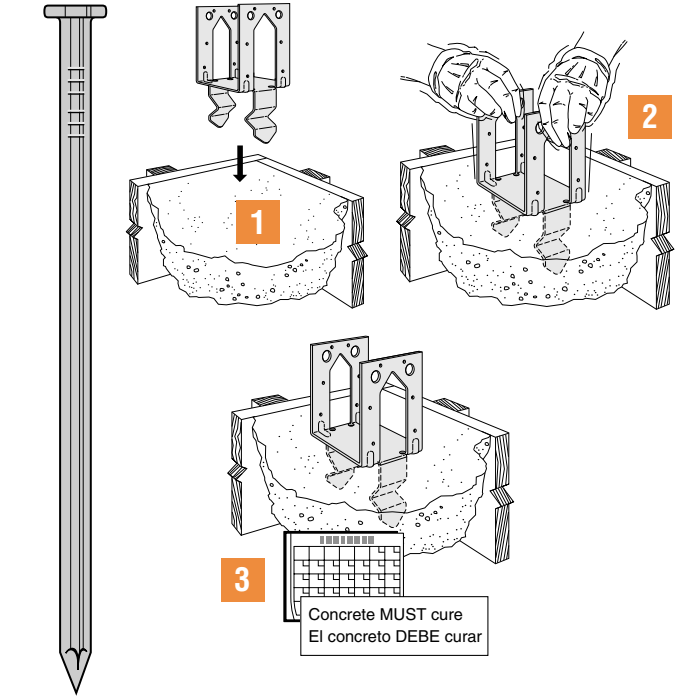
16d
(0.162" x 3½")



With sheathing / Con relleno

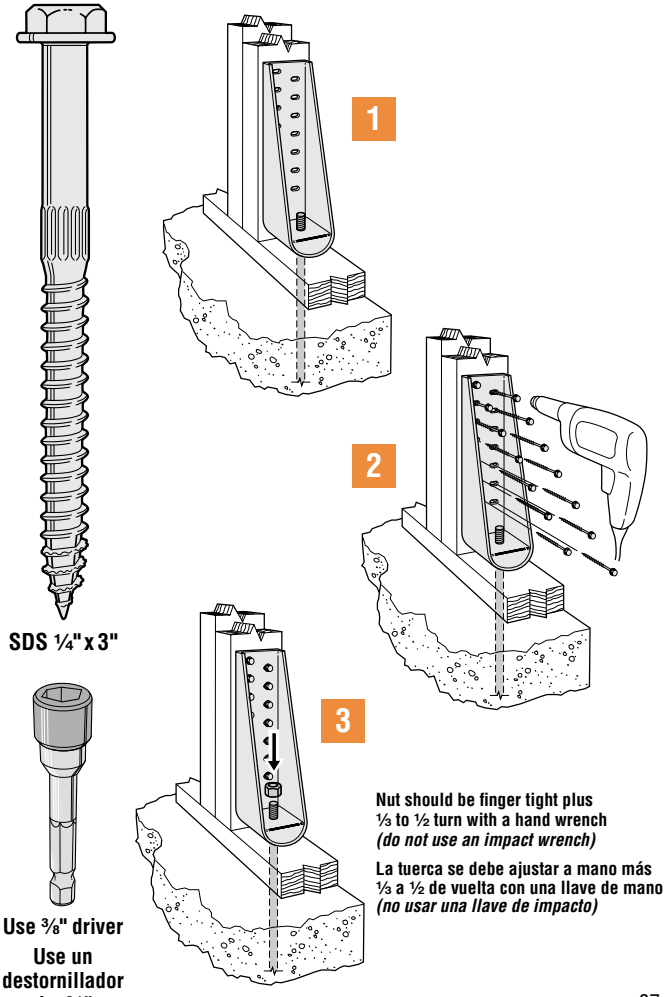


PB



16d
(0.162" x 3½")

PHD



SDS ¼" x 3"

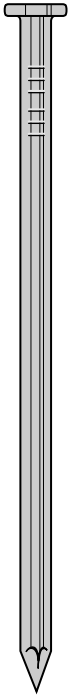
Use ⅜" driver

Use un destornillador de ⅜"

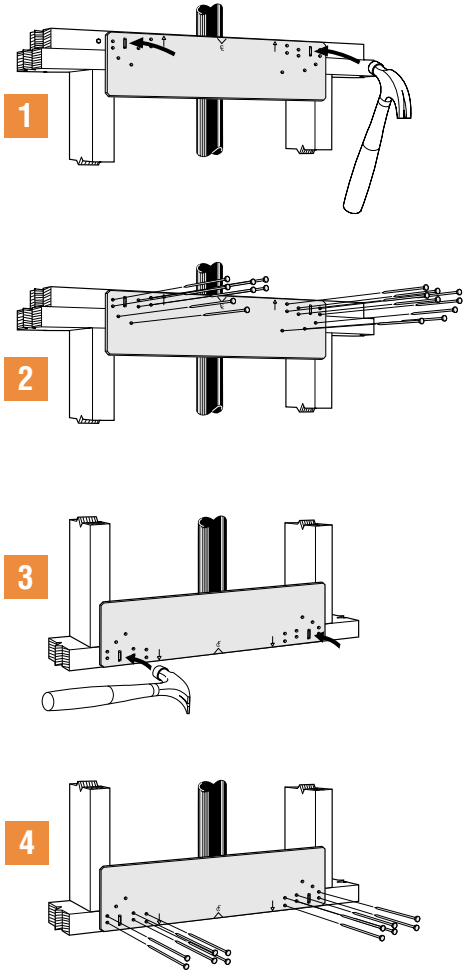
Nut should be finger tight plus ⅓ to ½ turn with a hand wrench *(do not use an impact wrench)*

La tuerca se debe ajustar a mano más ⅓ a ½ de vuelta con una llave de mano *(no usar una llave de impacto)*

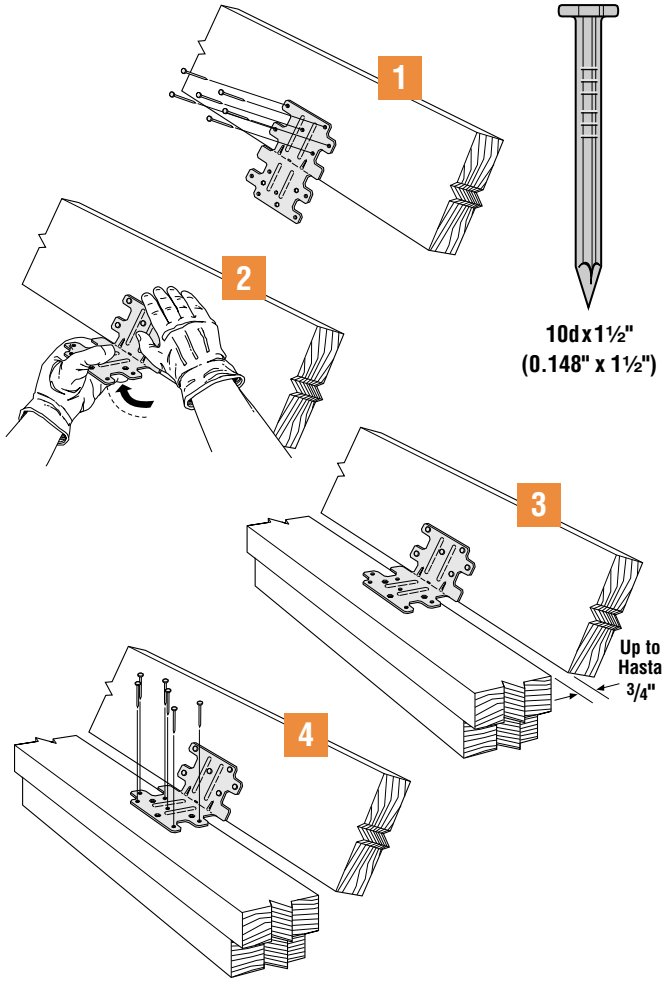
PSPN



16d
(0.162" x 3½")

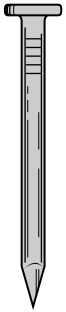


RBC

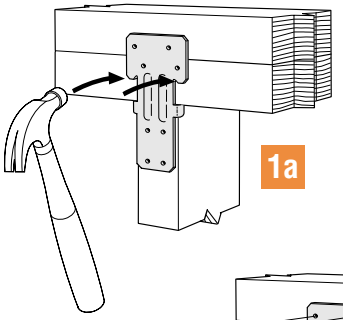


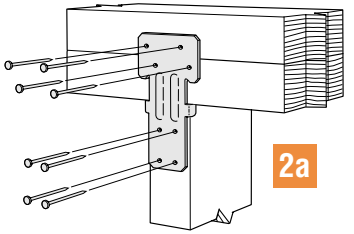
10d x 1½"
(0.148" x 1½")

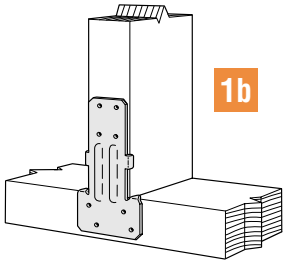
RSP4

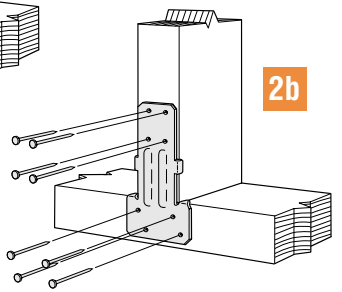


8d x 1½"
(0.131" x 1½")

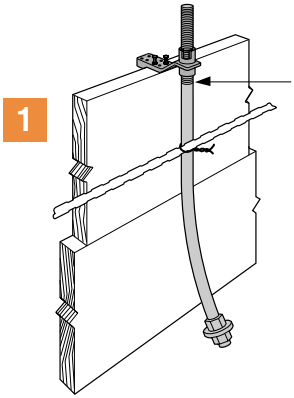


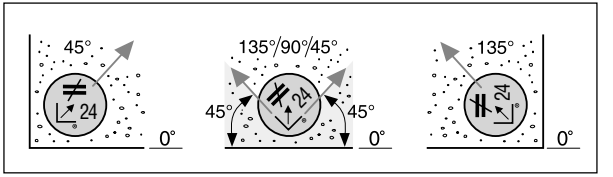


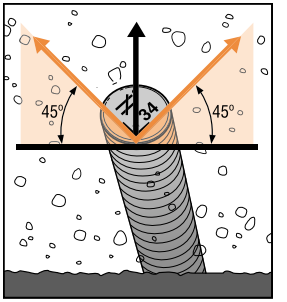


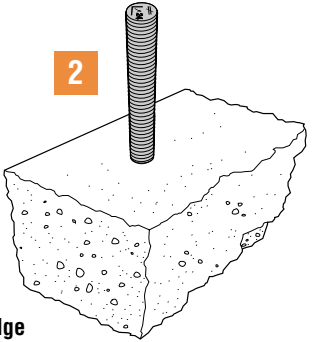


SB



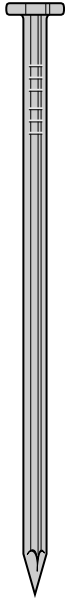




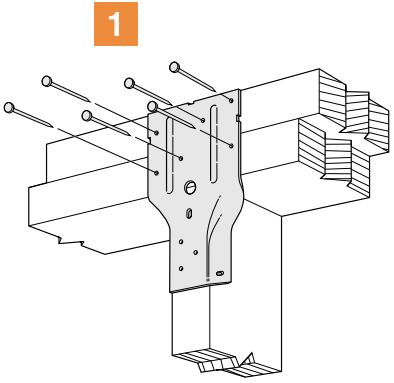


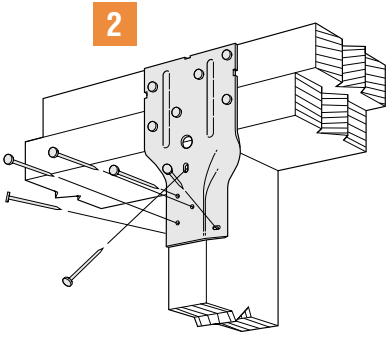
Install a minimum 45° from either edge
Instalar a mínimo 45° de cada cara

SP

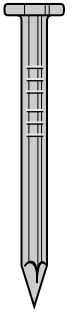


10d
(0.148" x 3")

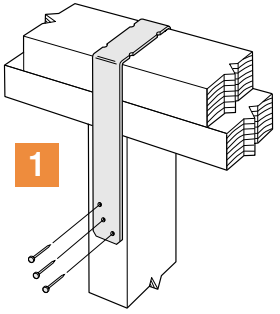


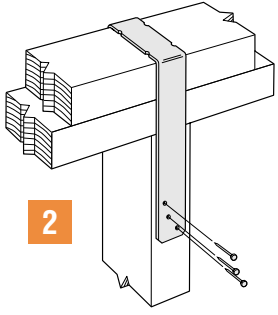


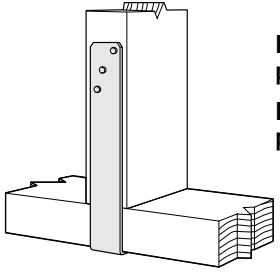
SP4



10d x 1½"
(0.148" x 1½")



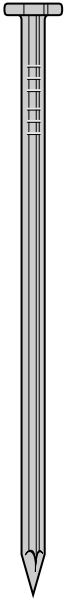




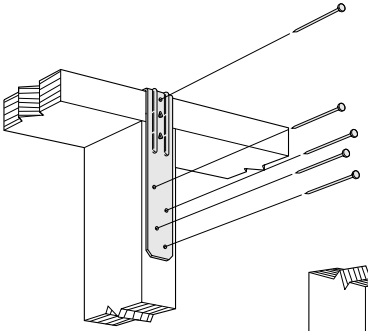
Installation on mudsill/bottom plate similar

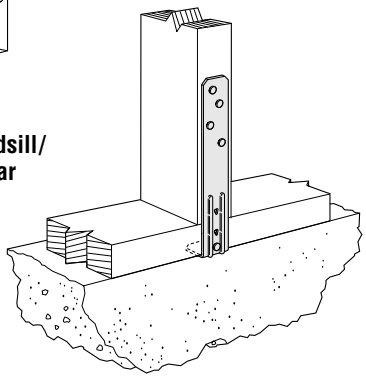
Instalación en solera/similar a la placa inferior

SSP



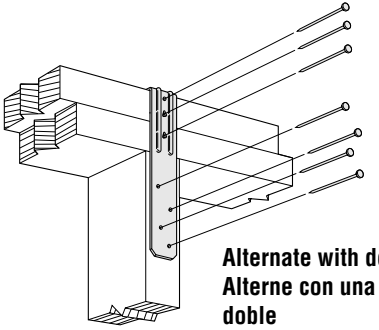
10d
(0.148" x 3")





Installation on mudsill/
bottom plate similar

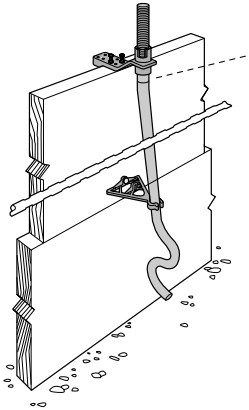
Instalación en
solera/similar a
la placa inferior



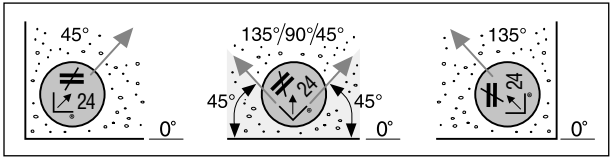
Alternate with double top plate
Alterne con una placa superior
doble

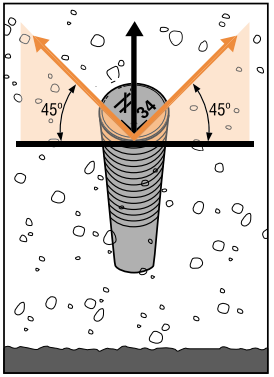
SSTB

1



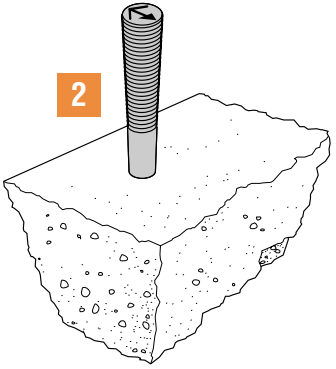
Embedment line
(top of concrete)
Línea de empotramiento
(parte superior del concreto)





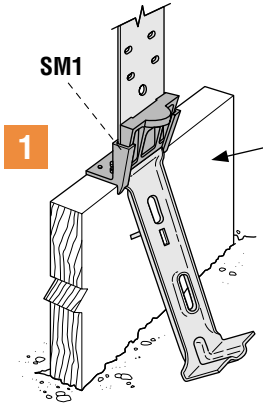
Install 45° from either edge
Instalar 45° de cada cara

2



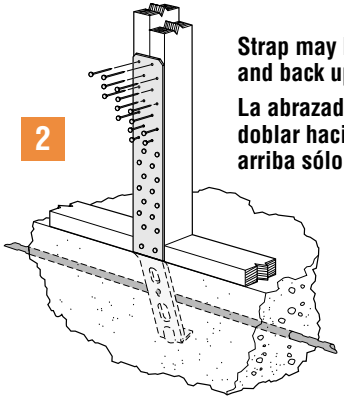
STHD – w/StrapMate®

16d Sinker
(0.148 " x 3¼")



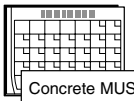
Embedment line
(top of concrete)

Línea de empotramiento
(parte superior del concreto)



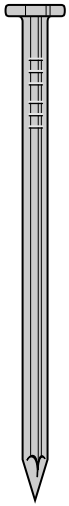
Strap may be bent down and back up one time only

La abrazadera se puede doblar hacia abajo y hacia arriba sólo una vez

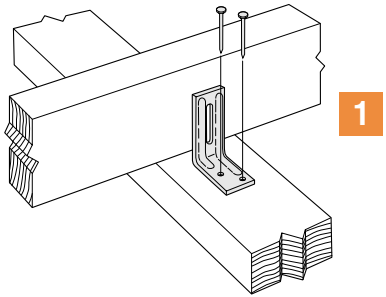


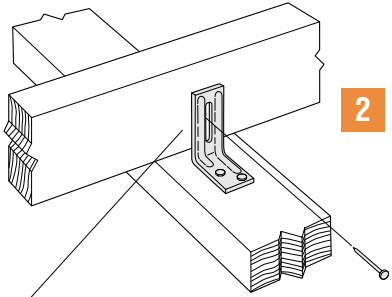
Concrete MUST cure
El concreto DEBE curar

STC

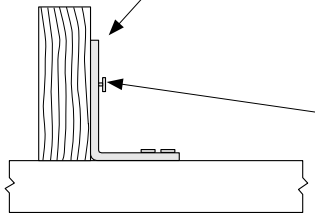


8d
(0.131" x 2½")



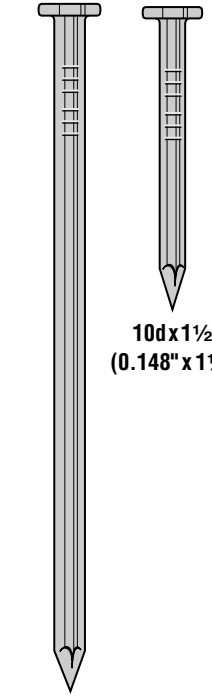


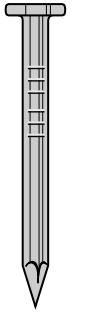
Install nail in center of slot
Instale el clavo en el centro de la ranura

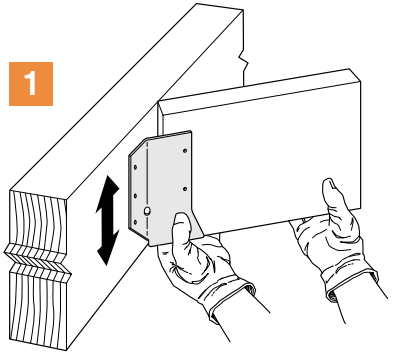


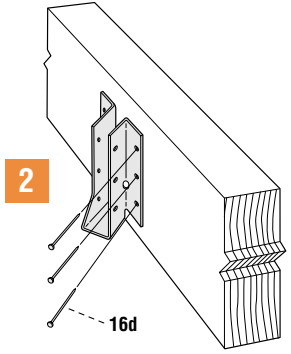
Truss nails not driven flush

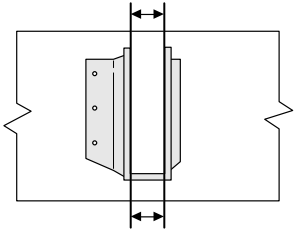
Los clavos de la cercha no deberían asentarse contra el conector

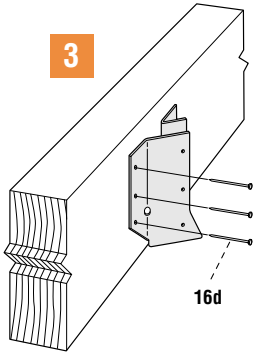

16d
(0.162" x 3½")

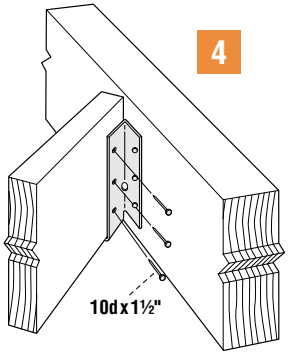

10d x 1½"
(0.148" x 1½")

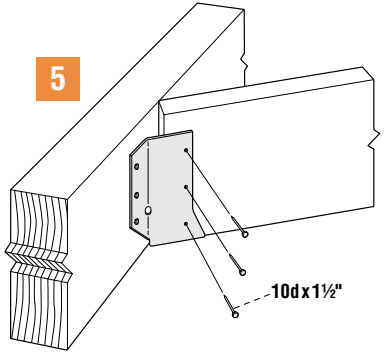

1


2
16d




3
16d

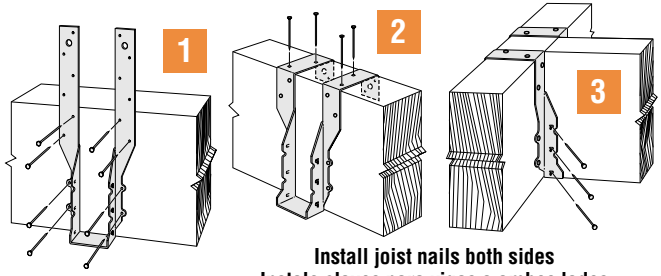

4
10d x 1½"


5
10d x 1½"

THA Installation on Solid Header
Instalación Sobre Viga Cabezal Sólida

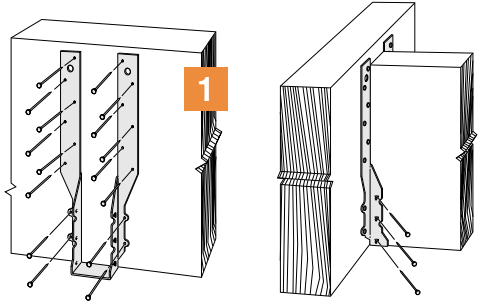
SIMPSON Strong-Tie

Top-Mount Condition / Condición de Montaje Superior



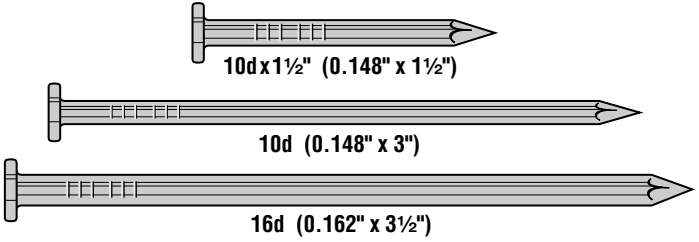
Install joist nails both sides
Instale clavos para vigas a ambos lados

Face Mount Condition / Condición de Montaje Sobre Cara



Install joist nails both sides

Instale clavos para vigas a ambos lados

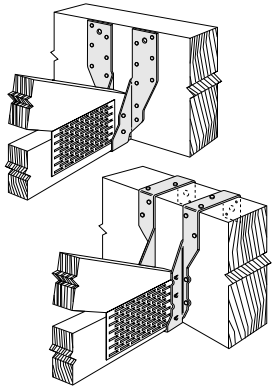


THA

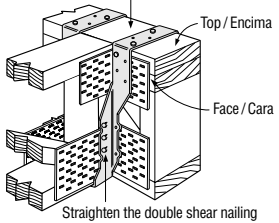
SIMPSON Strong-Tie

Installation on Solid Header
Instalación Sobre Viga Cabezal Sólida

Model Modelo	Top & Face Encima & Cara	Carried Member Miembro Soportado
THA29	16-10d	4-10d
THA213	14-10d	4-10d
THA413		
THA218	18-10d	4-10d
THA218-2	22-16d	6-16d
THA418		
THA422		
THA222-2		
THA422-2	30-16d	6-16d
THA426		



Double 2x4 Top Chord Min.
Viga Superior Doble de 2 x 4 Como Mínimo



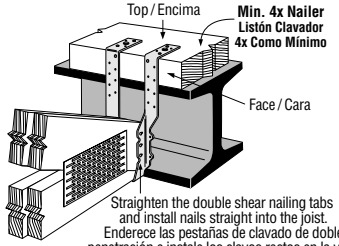
Straighten the double shear nailing tabs and install nails straight
Enderece las pestañas de clavado de doble penetración e instale los clavos rectos.

Installation on Truss
Instalación Sobre Cercha

Nail Location Ubicación de Los Clavos	Qty / Nail Cant./Clavo
Top / Encima	4-16d
Face / Cara	4-16d
Carried Member Miembro soportado	Fill all holes with 16d Llene todos los orificios con clavos 16d.

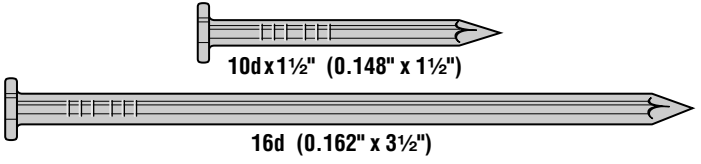
Installation on Nailer
Instalación en Listón Clavador

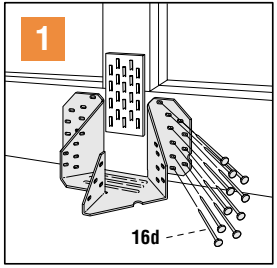
Nail Location Ubicación de Los Clavos	4x Nailer / Listón Clavador 4x
Top / Encima	4-16d
Face / Cara	4-16d
Carried Member Miembro soportado	Fill all holes with 16d Llene todos los orificios con clavos 16d.

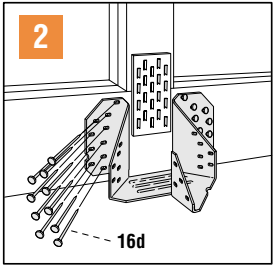


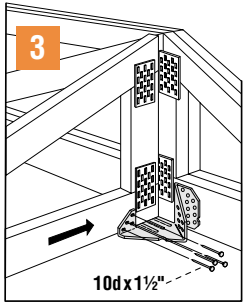
Straighten the double shear nailing tabs and install nails straight into the joist.
Enderece las pestañas de clavado de doble penetración e instale los clavos rectos en la viga.

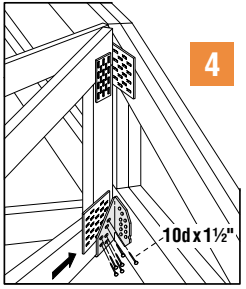
THJA

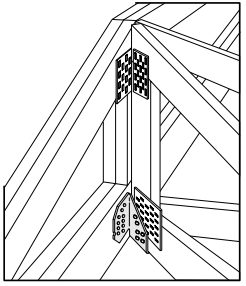








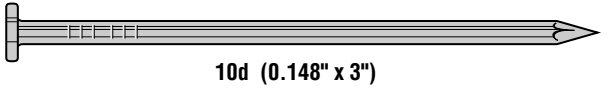


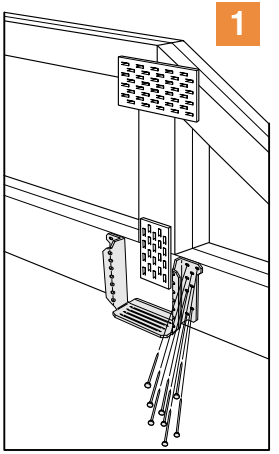


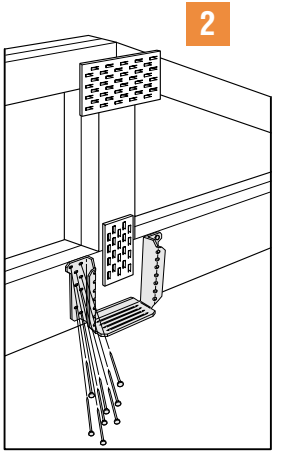
Left hand hip installation similar

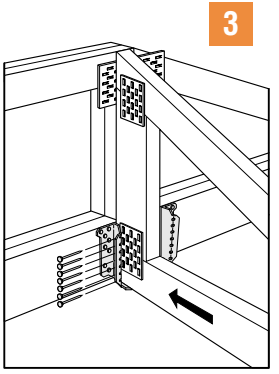
Similar a la instalación 'izquierda' de cumbre

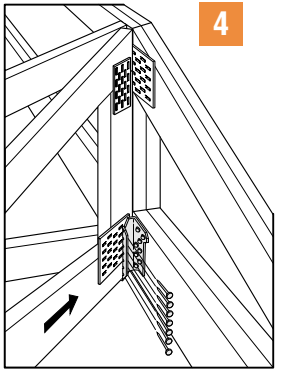
THJU

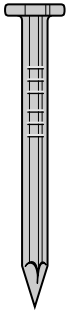




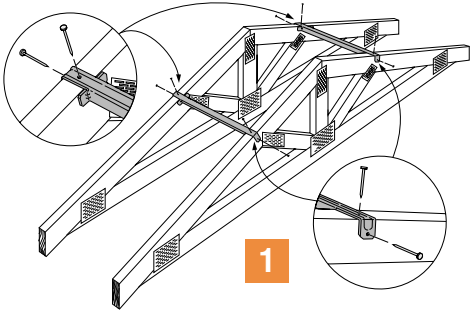


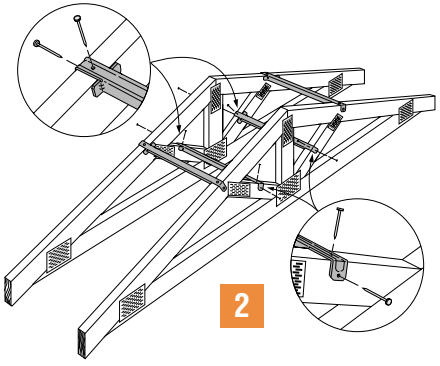


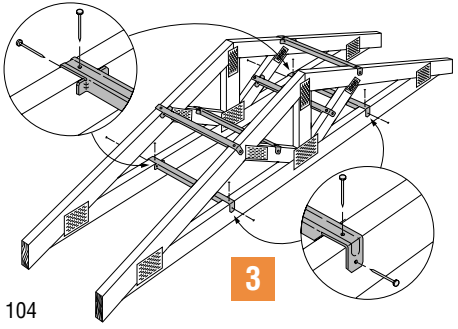


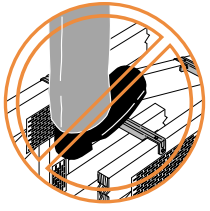


10d x 1½"
(0.148" x 1½")



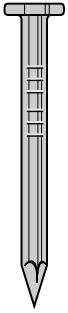




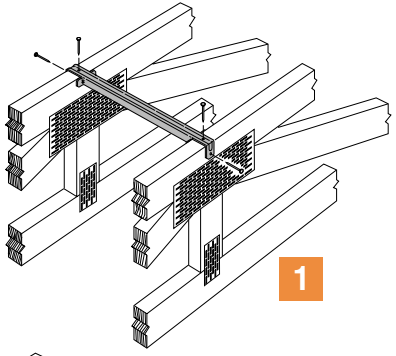


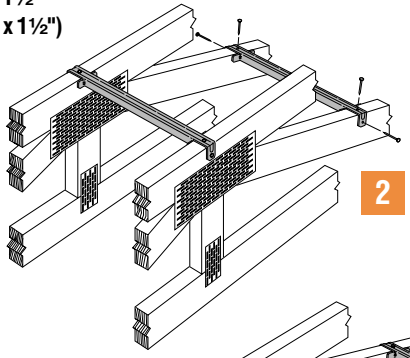
NO STEP
NO PISAR

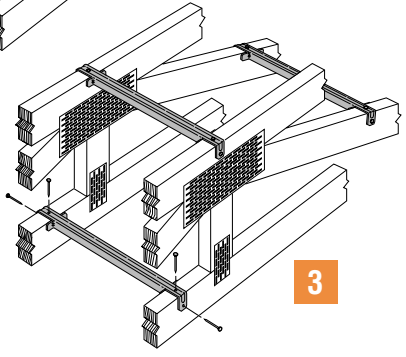
TSB

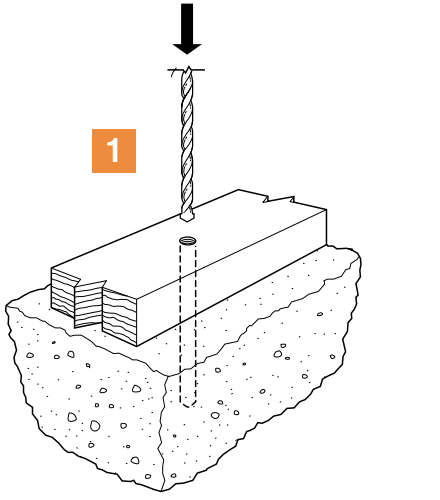


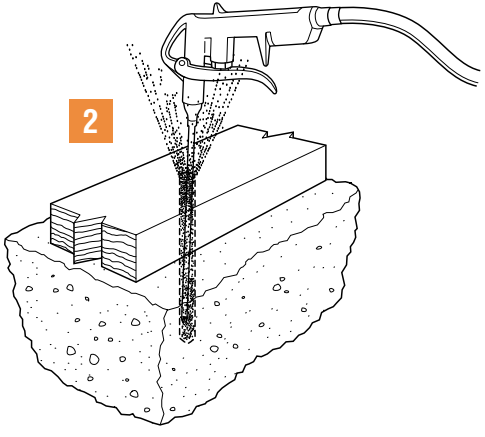
10d x 1½"
(0.148" x 1½")








1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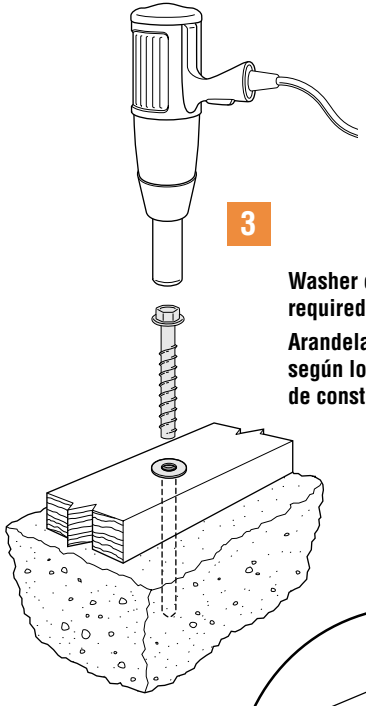
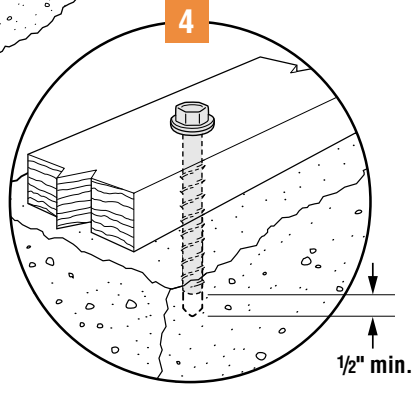
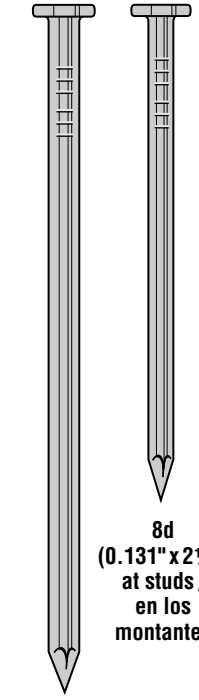

3
Washer or bearing plate as required by building code
Arandela o disco de presión según lo requiera el código de construcción

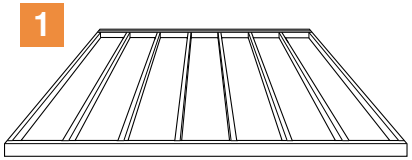

4
½" min.

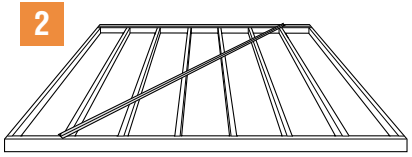
TWB

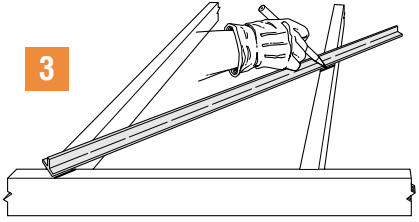


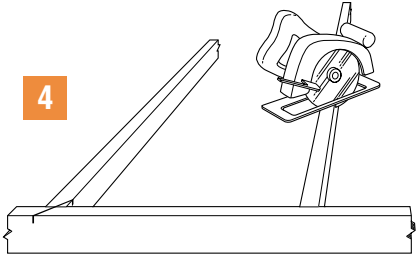
16d
(0.162" x 3½")
at plates /
en las soleras

8d
(0.131" x 2½")
at studs /
en los
montantes



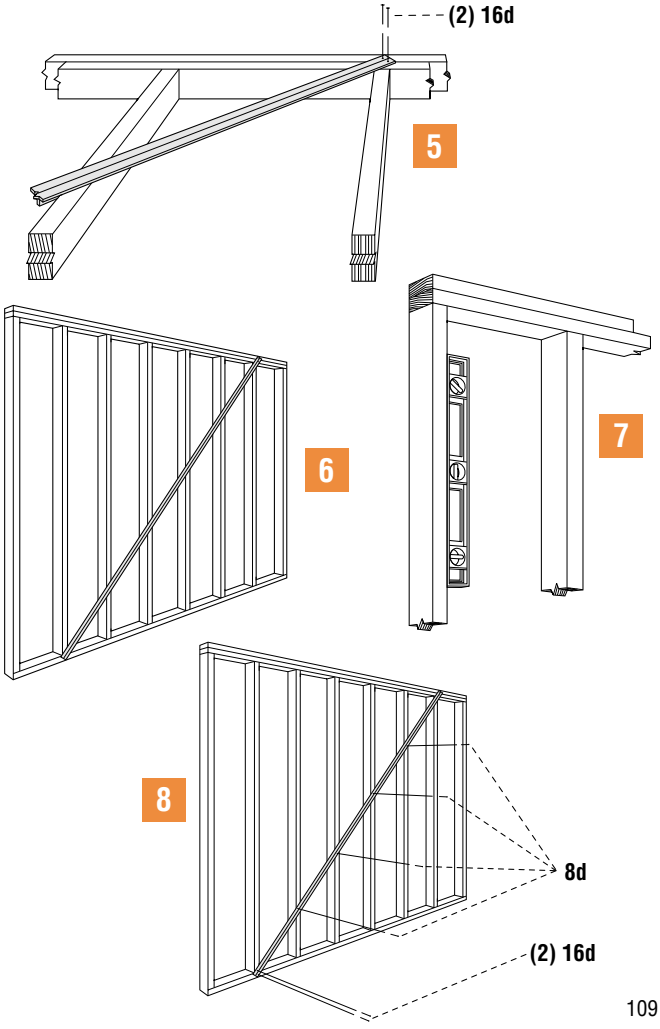




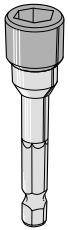


Cut ⅝" kerf
Corte un corte
de ⅝"

TWB



SDS ¼" x 3"

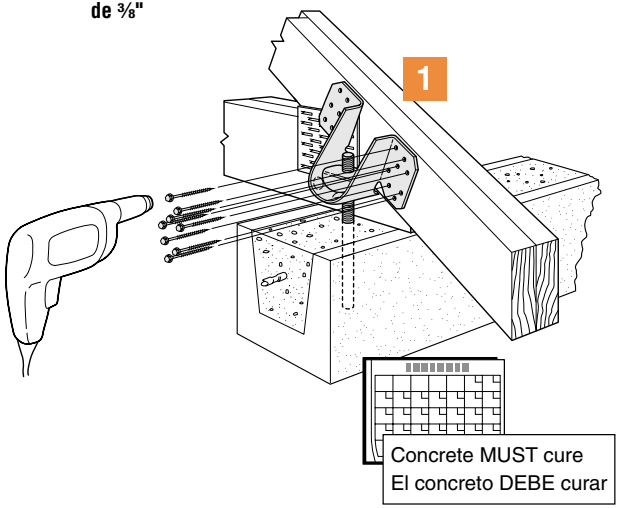


Use ⅜" driver

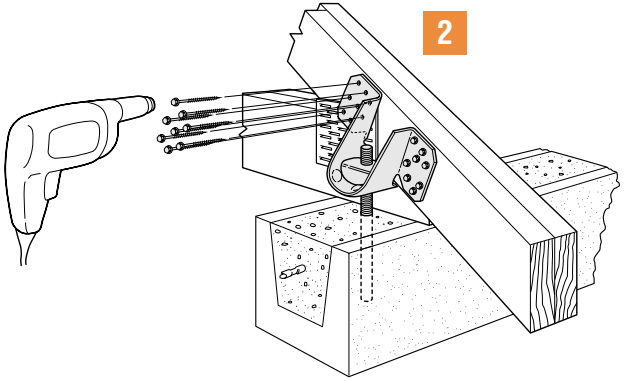
Use un destornillador de ⅜"

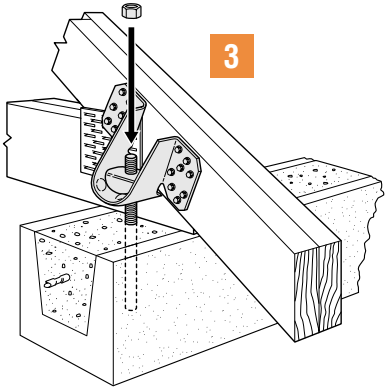
If using an adhesive anchor, see page 24 for instructions.

Si utiliza un anclaje adhesivo, consulte las instrucciones de la página 24.

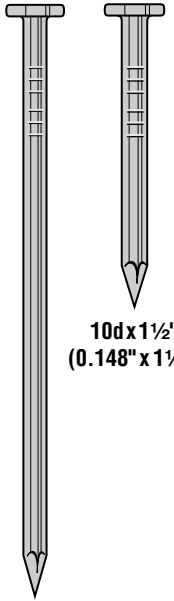


VGT



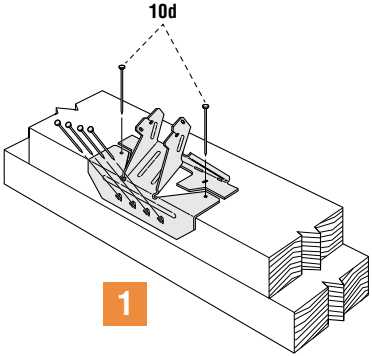


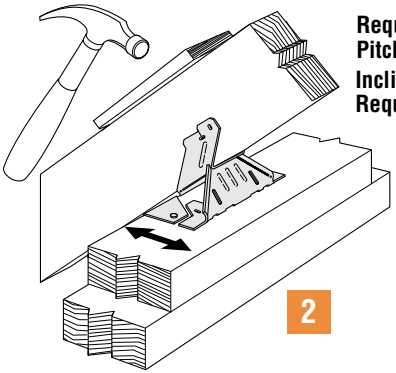
VPA



10d x 1½"
(0.148" x 1½")

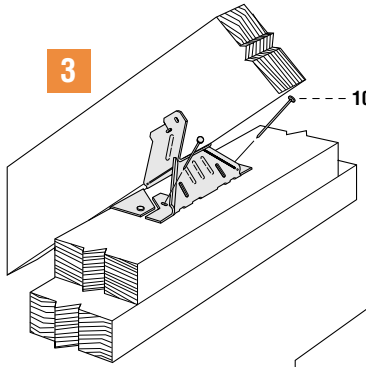
10d
(0.148" x 3")

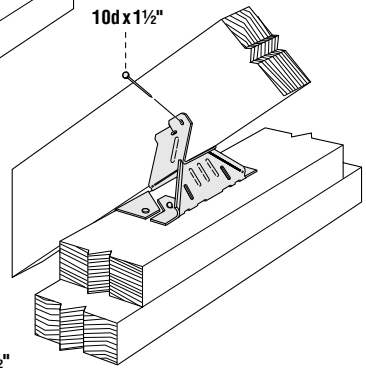


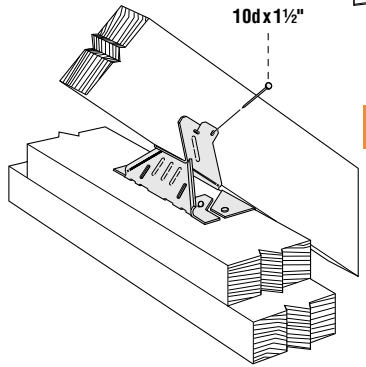


Required
Pitch
Inclinación
Requerida

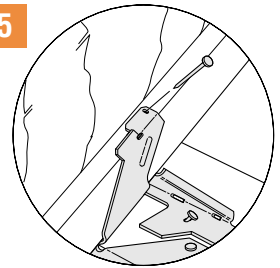
VPA







Solid Wood
Madera Sólida



I-Joist
Vigueta

Notes/Notas

Notes/Notas

Notes/Notas

Notes/Notas

Notes/Notas

Notes/Notas